

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: August 6, 2005, 14:34:44 ; Search time 346 Seconds  
(without alignments)  
9387.310 Million cell updates/sec

Title: US-09-884-211B-2

Perfect score: 1985

Sequence: 1 ctaagaccgtggggaggcag.....gaaataaaaaaaaaaaaaa 1985

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents\_NA.\*  
1: /cgn2\_6/ptodata/1/ina/5A\_COMB.seq.\*  
2: /cgn2\_6/ptodata/1/ina/5B\_COMB.seq.\*  
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6: /cgn2\_6/ptodata/1/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	958.2	48.3	1671	2	US-08-662-560-1
2	958.2	48.3	1671	2	US-08-780-749A-5
3	958.2	48.3	1671	3	US-08-870-511-5
4	939	47.3	1671	3	US-08-706-281A-15
5	939	47.3	1671	3	US-09-097-231-15
6	939	47.3	1671	4	US-09-353-099-15
7	818.8	41.2	999	4	US-09-016-434-1277
8	817.6	41.2	1030	4	US-09-831-206-1
9	817.4	41.2	996	1	US-08-671-525B-7
10	817.4	41.2	996	1	US-08-672-109B-7
11	817.4	41.2	996	1	US-08-842-045-7
12	817.4	41.2	996	2	US-08-842-238-7
13	817.4	41.2	996	3	US-08-629-335B-7
14	815.6	41.1	999	3	US-08-870-511-7
15	815.6	41.1	999	3	US-08-870-511-9
16	815.6	41.1	999	3	US-08-870-511-11
17	703.6	35.4	840	4	US-09-380-419C-2
18	635.2	32.0	745	4	US-09-380-419C-1
19	436	22.0	1650	4	US-09-016-434-1473
20	428.2	21.6	1080	4	US-09-831-228-1
21	426.2	21.5	975	1	US-08-671-525B-9
22	426.2	21.5	975	1	US-08-672-109B-9
23	426.2	21.5	975	1	US-08-842-045-9
24	426.2	21.5	975	2	US-08-842-238-9
25	426.2	21.5	975	3	US-08-629-335B-9
26	426	21.5	978	3	US-08-706-281A-17
27	426	21.5	978	3	US-09-097-231-17

Sequence 17, Appl  
Sequence 15, Appl  
Sequence 1, Appl  
Sequence 5, Appl  
Sequence 5, Appl  
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Sequence 5, Appl  
Sequence 3, Appl  
Sequence 1228, Ap  
Sequence 522, App  
Sequence 3, Appl  
Sequence 3, Appl  
Sequence 3, Appl  
Sequence 11, Appl  
Sequence 11, Appl  
Sequence 11, Appl  
Sequence 9, Appl

## ALIGNMENTS

RESULT 1  
US-08-662-560-1  
; Sequence 1, Application US/08662560  
; Patent No. 5908609  
; GENERAL INFORMATION:  
; APPLICANT: Lee, Frank  
; APPLICANT: Huszar, Dennis  
; APPLICANT: Wei, Gu  
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS  
; TITLE OF INVENTION: USEFUL IN THE REGULATION OF BODY WEIGHT  
; NUMBER OF SEQUENCES: 2  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: Pennie & Edmonds  
; STREET: 1155 Avenue of the Americas  
; CITY: New York  
; STATE: NY  
; COUNTRY: USA  
; ZIP: 10036/2711  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/662,560  
; FILING DATE: 10-JUN-1996  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Coruzzi, Laura A  
; REGISTRATION NUMBER: 30,742  
; REFERENCE/DOCKET NUMBER: 7853-060  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 212-790-9090  
; TELEFAX: 212-869-8864  
; TELEX: 66141 PENNIE  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1571 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; FEATURE:  
; NAME/KEY: Coding Sequence  
; LOCATION: 394...1389  
; OTHER INFORMATION:  
US-08-662-560-1

















Db 729 AGCGATTACCTTGACCATCTGTAATGGGCTCTTTGTGTGCTGGGCCCACTTCTGCT 788  
Qy 1235 CCACCTTGATATTTCTACATCTCTGTGCCCCAGAAATCCATACCTGATGCTGCTCA 1294  
Db 789 CCACCTAATATTTCTACATCTCTGTGCCCCAGAAATCCATATGCTGCTGCTCA 848  
Qy 1295 CTTTAACTTGACCTCATTTCTGATCATGTGTAATCTCCATCATCGACCCCTCTCATTTATGC 1354  
Db 849 CTTTAACTTGATCTCATACTGATCATGTGTAATCTCAATCATCGATCCTCTGATTTATGC 908  
Qy 1355 ACTCCGGAGCCAGAGCTGAGGAAACCTTCAAGAGATCATCTGTTGCTATCTCTGG 1414  
Db 909 ACTCCGAGTCAAGAACTGAGGAAACCTTCAAGAGATCATCTGTTGCTATCCCTGG 968  
Qy 1415 TGGCCTTTGTGACTTGTCTAGCAGATACTA 1444  
Db 969 AGGCCCTTTGTGACTTGTCTAGCAGATACTA 998

RESULT 8  
US-09-831-206-1  
; Sequence 1, Application US/09831206  
; Patent No. 6573070  
; GENERAL INFORMATION:  
; APPLICANT: MacNeil, Douglas J.  
; APPLICANT: Weinberg, David H.  
; APPLICANT: Van der Ploeg, Leonardus H. T.  
; TITLE OF INVENTION: DNA MOLECULES ENCODING THE MELANOCORTIN  
; TITLE OF INVENTION: 4 RECEPTOR PROTEIN FROM RHESUS MONKEY  
; FILE REFERENCE: 20190P  
; CURRENT APPLICATION NUMBER: US/09/831,206  
; CURRENT FILING DATE: 2001-06-28  
; PRIOR APPLICATION NUMBER: PCT/US99/25767  
; PRIOR FILING DATE: 1999-11-05  
; PRIOR APPLICATION NUMBER: 60/107,721  
; PRIOR FILING DATE: 1998-11-09  
; NUMBER OF SEQ ID NOS: 6  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 1030  
; TYPE: DNA  
; ORGANISM: rhesus monkey (Macaca mulatta)  
US-09-831-206-1

Query Match 41.2%; Score 817.6; DB 4; Length 1030;  
Best Local Similarity 87.4%; Pred. No. 4.3e-189;  
Matches 895; Conservative 0; Mismatches 129; Indels 0; Gaps 0;

Qy 436 CTTGTTGCAGGATGAATCCACCTTTCAGCAGGAAATGCACACTTCTCTCCACTTCTGGA 495  
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Qy 496 ACCGAGACCTACGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 555  
Db 66 ACCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 125  
Qy 556 ACCGGGATGCTACGAGCAACTCTGCTCTCCCGAGGCTTCTGCTGCTGGGGTCA 615  
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Qy 616 TAAGCTTCTCGAGAACATCTTGTGTGCTGAGCAATAGCAAGCAAGCAAGCAATCTGCACT 675  
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Db 246 CACCATGATCTTTTTCATCTGTAGCTGCTGGCCGATATGCTGTGAGCGTTTCCA 305  
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Db 426 TTTCAGGCTGCTCTCAATTCAGTGGACAGTACTTTACTATCTTTTATGCTCTTCACT 485  
Qy 916 ACCATAACATCATGACGGTGGGGTGGGATCATCATCAGTTGTCATCTGGGCGGCTT 975  
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Qy 976 GCACGGTGTGAGGATCTTTGTCATCTTTACTCGACAGTACTGCTGTCATCATCTGCC 1035  
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Qy 1096 TCATGGCCAGACTGCACATCAAGAGATCGCGCTCTCCCGGACCGGCAACCATCCGCC 1155  
Db 666 TGATGGCCAGGCTTCAATTAAGAGATGCTGCTCTCCCGGACCGGCAACCATCCGCC 725  
Qy 1156 AAGGGGCCAATGAAAGGGTCCCATTAACCTTGACCATACTCATTTGGGGTCTTTGCTGCT 1215  
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Qy 1216 GCTGGGCTCATTCTTCTCCACTGATTAATCTACATCTCTTTGCCAGAAATCCATACT 1275  
Db 786 GCTGGGCTCATTCTTCTCCACTGATTAATCTACATCTCTTTGCCAGAAATCCATACT 845  
Qy 1276 GTGTGTGCTTCCATGCTCCTACCTTTAACTTTGTAACCTCATCTGATGTAATCCATCA 1335  
Db 846 GTGTGTGCTTCCATGCTCCTACCTTTAACTTTGTAACCTCATCTGATGTAATCCATCA 905  
Qy 1336 TCGACCTCTCATTTATGCACTCCGGAGCCAGAGCTGAGGAAACCTTTCAAAGAGATCA 1395  
Db 906 TCGATCTCTCATTTATGCACTCCGGAGTCAAGAACTTAAGGAAACCTTTCAAAGAGATCA 965  
Qy 1396 TCTGTTGCTATCTCTGGGGCTTTTGTGATCTGTCTAGCAGATAGCTAGCTGGGACAG 1455  
Db 966 TCTGTTGCTATCTCTGGGGCTTTTGTGATCTGTCTAGCAGATATTTAAATGGGACAG 1025  
Qy 1456 AGGA 1459  
Db 1026 AGCA 1029

RESULT 9  
US-08-671-525B-7  
; Sequence 7, Application US/08671525B  
; Patent No. 5703220  
; GENERAL INFORMATION:  
; APPLICANT: Yamada, Tadataka  
; APPLICANT: Gantz, Ira  
; TITLE OF INVENTION: Genes Encoding Melanocortin Receptors  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; STREET: P.O. Box 828  
; CITY: Bloomfield Hills  
; STATE: MI  
; COUNTRY: US  
; ZIP: 48303  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/671,525B  
; FILING DATE: June 27, 1996  
; CLASSIFICATION: 435

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; ATTORNEY/AGENT INFORMATION:
;   NAME: Smith, DeAnn F.
;   REGISTRATION NUMBER: 36683
;   REFERENCE/DOCKET NUMBER: 2115-000853DVB
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (810)641-1600
;   TELEFAX: (810)641-0270
;   INFORMATION FOR SEQ ID NO: 7:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 996 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: double
;   TOPOLOGY: linear
;   MOLECULE TYPE: DNA (genomic)
;   HYPOTHETICAL: NO
;   ANTI-SENSE: NO
;   ORIGINAL SOURCE:
;   ORGANISM: homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: 1..996
;   US-08-671-525B-7

Query Match      41.2%; Score 817.4; DB 1; Length 996;
Best Local Similarity 89.3%; Pred. No. 4.7e-189; Indels 0; Gaps 0;
Matches 881; Conservative 0; Mismatches 106;

Qy 455 CACCCTTCAGCAGGGAATGCACACTTCTCCACTTCTGGAACCGCAGCACTACGGACA 514
Db 9 CTCACCCACCGTGGGATGCACACTTCTGCACCTCTGGAAACCGCAGCACTTACAGACT 68

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Db 69 GCACAGCAATCCAGTGAAGTCCCTTGGAAAGGCTACTCTGATGAGGGTGTCTACGAGCA 128

Qy 575 ACTCTTGTCTCCCGGAGGTTGCTGACTCTCGGGGTCAATAGCTTGTCTGGAGAACAT 634
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Qy 695 CTGTAGCTGTGCTGGCCGATATCTGTGTAGGCTTTCGACGGTTCGACGGTTCAGACCATCGT 754
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Qy 815 TGTCAATGACTCGGTGATCTGTAGTCTCTGTCTCGCTCGATTTGACGCTGTCTCTCAAT 874
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Qy 875 TGCAGTGAAGGTTACTTACTATCTTTATGCGCTCCAGTACCATAACATCATGACGGT 934
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Db 969 AGGCTTTGTGACTTGTCTAGCAGATA 995

RESULT 10
US-08-672-109B-7
; Sequence 7, Application US/08672109B
; Patent No. 5710265
; GENERAL INFORMATION:
;   APPLICANT: Yamada, Tadataka
;   APPLICANT: Gantez, Ira
;   TITLE OF INVENTION: Genes Encoding Melanocortin Receptors
;   NUMBER OF SEQUENCES: 23
;   CORRESPONDENCE ADDRESS:
;   ADDRESS: Harnes, Dickey & Pierce, P.L.C.
;   STREET: P.O. Box 828
;   CITY: Bloomfield Hills
;   STATE: MI
;   COUNTRY: US
;   ZIP: 48303
;   COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Patentin Release #1.0, Version #1.25
;   CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/672.109B
;   FILING DATE: June 27, 1996
;   CLASSIFICATION: 536
;   ATTORNEY/AGENT INFORMATION:
;   NAME: Smith, DeAnn F.
;   REGISTRATION NUMBER: 36683
;   REFERENCE/DOCKET NUMBER: 2115-000853DVC
;   TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (810)641-1600
;   TELEFAX: (810)641-0270
;   INFORMATION FOR SEQ ID NO: 7:
;   SEQUENCE CHARACTERISTICS:
;   LENGTH: 996 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: double
;   TOPOLOGY: linear
;   MOLECULE TYPE: DNA (genomic)
;   HYPOTHETICAL: NO
;   ANTI-SENSE: NO
;   ORIGINAL SOURCE:
;   ORGANISM: homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: 1..996
;   US-08-672-109B-7

Query Match      41.2%; Score 817.4; DB 1; Length 996;
Best Local Similarity 89.3%; Pred. No. 4.7e-189;
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Qy 815 TGTCAATTGACTCGGTGATCTGTAGCTCTTGTCTGGCTCGATTTTGCAGCCCTGCTCTCAAT 874  
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Qy 995 GTTCATCATTTACTCGGACGACTGTGTGCATCATCTGCTCATCATGCTCATGCTTCTTAC 1054  
Db 549 GTTCATCATTTACTCAGATAGTGTGTGCATCATCTGCTCATCATGCTCATGCTTCTTAC 608  
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Db 609 CATGCTGGCTCTCATGGCTTCTCTATGTCCACATGTTCTGATGGCCAGGCTTCACAT 668  
Qy 1115 CAAGAGAAATCCCGTCTTCCGGGACCGGCACCATCCGCCAAGGCGGCAACATGAAGGG 1174  
Db 669 TAAGAGGATTGCTGTCTTCCCGGACCTGGTGGCCATCCGCCAAGGTGCCAATATGAAGGG 728  
Qy 1175 TGCCATTACCTTGACCATACTACTTGGGGTCTTGTGTCTGCTGGGCTCCATCTTCTT 1234  
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Db 789 CCACCTTAATTTACATCTCTGTCTCCAGATCCATATGTTGTGTCTTCAATGTCTCA 848  
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Db 909 ACTCGGAGTCAAGAACTGAGGAACTTCAAGAGATCATCTGTTGCTATCTCTCTGGG 968  
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Db 969 AGGCTTTGTGACTTGTCTACAGATA 995

RESULT 12

US-08-842-238-7  
; Sequence 7, Application US/08842238  
; Patent No. 5869257  
; GENERAL INFORMATION:  
; APPLICANT: Yamada, Tadataka  
; APPLICANT: Gantz, Ira  
; TITLE OF INVENTION: Genes Encoding Melanocortin Receptors  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Harnes, Dickey & Pierce, P.L.C.  
; STREET: P.O. Box 828  
; CITY: Bloomfield Hills  
; STATE: MI  
; COUNTRY: US  
; ZIP: 48303  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/842,238  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, DeAnn F.

; REGISTRATION NUMBER: 36683  
; REFERENCE/DOCKET NUMBER: 2115-000853DVD  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (810)641-1600  
; TELEFAX: (810)641-0270  
; INFORMATION FOR SEQ ID NO: 7:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 996 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: DNA (genomic)  
; HYPOTHETICAL: NO  
; ANTI-SENSE: NO  
; ORIGINAL SOURCE:  
; ORGANISM: homo sapiens  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 1..996  
; US-08-842-238-7

Query Match 41.2%; Score 817.4; DB 2; Length 996;  
Best Local Similarity 89.3%; Pred. No. 4.7e-189;  
Matches 881; Conservative 0; Mismatches 106; Indels 0; Gaps 0;  
Qy 455 CACCCCTTCAGACCGGAATGCACACTTCTCTCCACTTCTGGAAACCGGAGCCTACGGACA 514  
Db 9 CTCACCCACCGTGGGATGCACACTTCTCTGCACCTCTGGAACCGGAGCCTACGACT 68  
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Db 69 GCACAGCAATGCCAGTGGTCCCTTGGAAAGGCTACTCTGATGGAGGGTGTACGAGCA 128  
Qy 575 ACTCTTCGTCTCCCGGAGGTGTGCTGATCTCTGGGGTCAATAGCTTGTCTGGAGAACAT 634  
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Qy 635 TCTGCTGATCGTGGCAATAGCAGAACAGATCTGCATCACCCTGACTCTTTTCAT 694  
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Db 309 CATCACCCCTATTAAACAGTACAGATACGGATGCACAGAGTTTCAACAGTGAATATGTATAA 368  
Qy 815 TGTCAATTGACTCGGTGATCTGTAGCTCTTGTCTGGCTCGATTTTGCAGCCCTGCTCTCAAT 874  
Db 369 TGTCAATTGACTCGGTGATCTGTAGCTCTTGTCTGGCTCGATTTTGCAGCCCTGCTCTCAAT 428  
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Db 429 TGCAAGTGACAGGTACTTTTACTATCTTTATGCTCTCCAGTACCATAACATCATGACAGT 488  
Qy 935 GAGCGGGTTCGGATCATCATCAGTTGCATCTGGCGGCTTGCACGGTGTGAGGCATCTT 994  
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Qy 995 GTTCATCATTTTACTCGGACGACTGTGTGCATCATCTGCTCATCATGCTCATGCTTCTTAC 1054  
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; GENERAL INFORMATION:
; APPLICANT: Lee, Frank
; APPLICANT: Huszar, Dennis
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL IN THE
; FILE REFERENCE: 7853-083
; CURRENT APPLICATION NUMBER: US/08/870,511
; CURRENT FILING DATE: 1997-06-06
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 999
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(996)
US-08-870-511-7

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Best Local Similarity 89.0%; Pred. No. 1.3e-188;
Matches 881; Conservative 0; Mismatches 109; Indels 0; Gaps 0;

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; GENERAL INFORMATION:
; APPLICANT: Lee, Frank
; APPLICANT: Huszar, Dennis
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL IN THE
; FILE REFERENCE: 7853-083
; CURRENT APPLICATION NUMBER: US/08/870,511
; CURRENT FILING DATE: 1997-06-06
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 9
; LENGTH: 999
; TYPE: DNA
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US-08-870-511-9

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Best Local Similarity 89.0%; Pred. No. 1.3e-188;
Matches 881; Conservative 0; Mismatches 109; Indels 0; Gaps 0;

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Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

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Searched: 7297361 seqs, 3241162794 residues

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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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3	968.6	48.8	1950	10	US-09-910-180-1
4	958.2	48.3	1671	15	US-10-413-752-5
5	939	47.3	1671	15	US-10-288-160-15
6	939	47.3	1671	15	US-10-074-754-1
7	899	45.3	1320	13	US-10-027-632-124866

#### ALIGNMENTS

##### RESULT 1

US-09-884-211A-2  
; Sequence 2, Application US/09884211A  
; Publication No. US20030032791A1  
; GENERAL INFORMATION:  
; APPLICANT: Alan et. al.  
; TITLE OF INVENTION: NOVEL MELANOCORTIN-4 RECEPTOR SEQUENCES AND SCREENING ASSAYS TO IDENTIFY COMPOUNDS USEFUL  
; TITLE OF INVENTION: IN REGULATING ANIMAL APPETITE AND METABOLIC RATE  
; FILE REFERENCE: PCT/0743A  
; CURRENT APPLICATION NUMBER: US/09/884, 211A  
; PRIOR FILING DATE: 2000-06-26  
; PRIOR FILING DATE: 2000-06-26  
; NUMBER OF SEQ ID NOS: 6  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 1985  
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US-09-884-211A-2

Query Match 100.0%; Score 1985; DB 10; Length 1985;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1985; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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11	818.8	41.2	999	17	US-10-305-720-1277	Sequence 1277, Ap
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13	817.2	41.2	999	10	US-09-876-252-73	Sequence 73, Appl
14	817.2	41.2	999	17	US-10-417-820A-73	Sequence 73, Appl
15	817.2	41.2	999	19	US-10-723-955-73	Sequence 73, Appl
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17	814	41.0	999	17	US-10-417-820A-135	Sequence 135, App
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QY 1441 ACTAGCTGGGACAGAGAAAGTACTAAAAACATGCAACAGAGCTTCTTCACTCTCACAC 1500  
DB 1441 ACTAGCTGGGACAGAGAAAGTACTAAAAACATGCAACAGAGCTTCTTCACTCTCACAC 1500  
QY 1501 AACATGAACCTGCTGCTTGGACCAACAGCTGCTTCTCAGTATAGGAGGAGTTGAGAT 1560  
DB 1501 AACATGAACCTGCTGCTTGGACCAACAGCTGCTTCTCAGTATAGGAGGAGTTGAGAT 1560  
QY 1561 ATCTGTTGCAAAATCAACTTATGATGTTTGTGATGTAAGAAAAAAGTCCCGAGGCTC 1620  
DB 1561 ATCTGTTGCAAAATCAACTTATGATGTTTGTGATGTAAGAAAAAAGTCCCGAGGCTC 1620  
QY 1621 TGTACATGCTAATGCTCATCTCTTGGGCTGCTGCAATTTGATTAATCCATTTGACGCTG 1680  
DB 1621 TGTACATGCTAATGCTCATCTCTTGGGCTGCTGCAATTTGATTAATCCATTTGACGCTG 1680  
QY 1681 TAGACACTTGAATTTCTAGAAAGAAAAAGCTTCCATTTAAAGCATATCAGTGTCTTCT 1740  
DB 1681 TAGACACTTGAATTTCTAGAAAGAAAAAGCTTCCATTTAAAGCATATCAGTGTCTTCT 1740  
QY 1741 TGTATTTCAGAGGATTTGGCAGCTTGTGCTTTAGAAACATAGAAATCATAGAAATCA 1800  
DB 1741 TGTATTTCAGAGGATTTGGCAGCTTGTGCTTTAGAAACATAGAAATCATAGAAATCA 1800  
QY 1801 TTAACATGTAAGCTGATTAAGTAACTTCTTATATATATATATATATATATATATATAT 1860  
DB 1801 TTAACATGTAAGCTGATTAAGTAACTTCTTATATATATATATATATATATATATAT 1860  
QY 1861 ATTGTAATGTAAGCTGATTAAGTAACTTCTTATATATATATATATATATATATATAT 1920  
DB 1861 ATTGTAATGTAAGCTGATTAAGTAACTTCTTATATATATATATATATATATATATAT 1920  
QY 1921 AACTGAAATTTTAAAGTAAATGTTTCACTTCTCCCTGTTGAGAAAAAAGAAAAA 1980  
DB 1921 AACTGAAATTTTAAAGTAAATGTTTCACTTCTCCCTGTTGAGAAAAAAGAAAAA 1980  
QY 1981 AAAAA 1985  
DB 1981 AAAAA 1985

## RESULT 2

US-09-884-211A-1

; Sequence 1, Application US/09884211A

; Publication No. US2003032791A1

; GENERAL INFORMATION:

; APPLICANT: Alan et. al.

; TITLE OF INVENTION: NOVEL MELANOCORTIN-4 RECEPTOR SEQUENCES AND

; TITLE OF INVENTION: SCREENING ASSAYS TO IDENTIFY COMPOUNDS USEFUL

; FILE REFERENCES: PC10743A

; CURRENT APPLICATION NUMBER: US/09/884, 211A

; CURRENT FILING DATE: 2000-06-26

; PRIOR APPLICATION NUMBER: 60/213, 909

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; PRIOR FILING DATE: 2000-06-26
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1708
; TYPE: DNA
; ORGANISM: Feline MC4R Nucleotide
US-09-8884-211A-1

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Query Match 58.8%; Score 1166.6; DB 10; Length 1708;  
Best Local Similarity 83.5%; Pred. NO. 3.3e-285;  
Matches 1418; Conservative 0; Mismatches 224; Indels 57; Gaps 6;

14	QY	GAGCGACGTGATGCGAACAATGTGACCGAGATTACGCTCTCGTGTGGCTCGCGCGCAATC	73
15			
16			
64	Db	GAGCGACGTGGTGTGAACATTTGTCGAACAACGGAATTCAGCTCCAGTGGCAGCAGCCCACTA	123
65			
66			
74	QY	GGAGAAATTACTTGGCAACAGACCTCACTGAAATGCCCTAGACTAAAGTTAAAGTGGGAGTGA	133
75			
124	Db	GGAAAAATTATTTGAAAAAGACCTGACTGAATGCCTCAGGCTAAAGTTAAAGTGGAAAGGGA	183
125			
134	QY	GGACAAAAAANAAGAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAGAAAAAG	193
135			
184	Db	GGACA-----GAAAAAGCAAAAG	201
185			
194	QY	CAGACTCTTTGAACTTAAGAATGAGCAATTCAGAAATCGAAGATGTTACAGTGAAGGTGAT	253
195			
202	Db	CAGACTCTTTCACTGAGAATGAGTATTTCAAGAGCCTAAGATTTTACAATGAAGGTGAT	261
203			
254	QY	CGGAGCTGTACTTGGAAAGACAGTAAGAGCTCCACTGCCAGCCTTTTGGAGCAGCGGACAG	313
255			
262	Db	CAGAGCGGTTCTGGGAGACAGTAAAAAATCCATTTCCAGCC--TGGGAGCACGTGACAT	319
263			
314	QY	GTACTCAACACCTGGCAGGCGCAGCTGGATCCTCAGAACTTTGGGACCGCACGGAGAGGGG	373
315			
320	Db	TTTACTC-ACAAACAGGCGATGCCAAATTTCAGCGCTCAGAACTTTTCGGGCGCAGACAAAGGCGTGG	378
321			
374	QY	AGAACATCACCGGGGCTCCCTGGCTGGAGAGGCGCGAATCAGTCCCGAGGGGCTCTGCATA	433
375			
379	Db	AGAAAAACACTGAGGCTACCTGACCCGAGAGATCGAATCAATTCGAGAGGGGATCTGAATC	438
380			
434	QY	CAC TTGTTGGAGATGAAC TCCACCTTTCAGCAGCGGAATGGACACTTCTCTCCACTTCTG	493
435			
439	Db	CAC -TGGTGCAGATGAAC TCCATCATCAACCATGGAA TGCACACTTCTCTCCACTTCTG	497
440			
494	QY	GAACCGCAGCACCTACGGCAGCAGCGCAACGCCACTAGTCCCTTGGCAAAAGGCTACCC	553
495			
498	Db	GAACCGCAGCACCTACGGCAGCAGCGCAACGCAATGCGATGAGTCCCTTGGAAAAAGGCTACTC	557
499			
554	QY	CGACGGGGGATGCTACGAGCAACTTTCTGCTCTCCCGAGGTTGTTCTGTGACTCTGGGGGT	613
555			
558	Db	TGATGGAGGGTGTATGAGCAACTTTTGTCTCCCTGAGGTGTTTGTGACTCTGGGTGT	617
559			
614	QY	CATAAGCTTCTCGAGAAACAATCTGGTGTATCGTGGCAATGCGCAAGCAAGCAATCTGCA	673
615			
618	Db	CATCAGCTTGTGGAGAAATATCTGGTGTATGTGGCAATAGCCAAAGCAAAACCTGCA	677
619			
674	QY	CTCACCATGTACTTTTTCATCTGTAGCCTGGGCTGTGGCGCGATATGCTGTGAGCGGTTTC	733
675			
678	Db	TTCGCCCATGTACTTTTTCATCTGCACGCTGGCTGTGGCTGATATGTTGTGTAGCGGTGC	737
679			
734	QY	CAACGGGTACAGACCAATCGTCAATCACCCTGTTGMAACAGTACGGATACGGAACGGCGACAG	793
735			
738	Db	AAACGGATCCGAAACCAATGTCATCAACCCCTATTAAACAGTACAGATACGACGCGCAGAG	797
739			
794	QY	TTTTCACGGTCAATATTGATAATGTCAATTGACTCGGTGATCTGTAGCTCCTTGTCTCGGCTC	853
795			
798	Db	TTTTCACCGTGAATATTGATTAATGTCAATTGACTCGGTGATCTGTAGCTCCTTGTCTTGATC	857
799			
854	QY	GATTTCAGCGCTGCTCTCAATTCAGTGGACAGGTACTTTTACTATCTTTTATGCCCTCCA	913
855			
858	Db	GATTTCAGCGCTGCTCTCAATTCAGTGGACAGGTACTTTTACTATCTTTTATGCTCTCCA	917
859			

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; TYPE: DNA
; ORGANISM: Bovine
US-09-910-180-1

Query Match      48.8%; Score 968.6; DB 10; Length 1950;
Best Local Similarity 76.4%; Pred. No. 6.8e-235;
Matches 1328; Conservative 0; Mismatches 379; Indels 32; Gaps 10;

Qy 224 AGAATCGAAGATGTTACAGTGAAGGTGATCGGAGCTGTACTCGAAGACAGTAAGAGCT 283
Db 68 AGCAGCCTAAGATTCCAAAGTGATGCTGACAGAGCCACACTTGAAGAGACTGAAGACT 127

Qy 284 CCATCGCAGCCTTTTGGAGCACGGGACAGGTACTCAACCTCGGAGGGCAGCTGGATC 343
Db 128 TCCTTTCCAGC--TCCGGAGCATGGGACATTTATTC-ACAGCAGGCATGCCACTCTCCGC 184

Qy 344 CTCAGAATTTTGGGACG---CACGGAGAGGGGAGAACATCACCGGGGCTCCCTGGCTG 399
Db 185 CGCCTAATCTTTCGTTTGGGGCAGTCAAGACTGGAGAAAGGTGCTGAGGCTGCCAGATCC 244

Qy 400 GAGAGGCGGAATCAGTCCCGAGGGGGTCTGCATACACTTGTTCAGGATGAATCCACCC 459
Db 245 AGGAGGTTCACTCAGTCCAGAGGGGACTGTAATCCAAA-----ATGAACCTTACCC 295

Qy 460 TTCAGCAGGNAATGCACACTTCTCTCCACTTCTGGAACCGGAGCACCTAGCGAGCAGC 519
Db 296 AGCCCTTGGGATGCACACCTCTCTCCACTCTCTGGAACCGGAGCCGCGCATGGATGCCA 355

Qy 520 GCAACGCCACTGAGTCCCTTGGCAAGGCTACCCGAGCGGGGATGCTACGAGCAACTCT 579
Db 356 CCAATGTCACTGAGTCCCTTGGCAAGGCTACTCGGACGGGGGTGCTATGAGCAGCTCT 415

Qy 580 TCGTCTCCCGAGGAGTGTTCGTGACTCTGGGGGTGATAAGCTTCTCGGAGAACTTCGG 639
Db 416 TTGCTCTCCCGAGGTTGTTGAGTCTCTGGGGTTCATCAGCTTCTTGAGAAATATTCGG 475

Qy 640 TGATCGTGGCAATAGCCAGAACAGAAATCTGCACTCACCACCTACTTTTCACTCTGTA 699
Db 476 TGATCGTGGCCATAGCCAGAACAGAAATCTGCACTCACCACCTACTTTTCACTCTGCA 535

Qy 700 GCCTGGCTGTGGCGATATGCTGTGAGCGGTTTCCACGGGTGAGAGACCATCGTCATCA 759
Db 536 GCCTGGCTGTGGCTGACATGTTGAGCGGTTTCCACGGGTGCGAAACCATGTCATCA 595

Qy 760 CCCTGTTGAACAGTACCGGATACCGACGCGAGAGTTCACGGTGAATATTCATATGTC 819
Db 596 CCCTGCTGAACAGCACGACGACGCGAGAGCTTCACGGTGGATATTCATGCAATGTC 655

Qy 820 TTGACTCGGTGATCTGATCTCCTTGTCTCGCTCGATTTGCGAGCTGCTCTCAATTGCG 879
Db 656 TTGACTCGGTGATCTGATCTCCTTGTCTCGCTCCATCTGCGAGCTTGTCTGATCGCGG 715

Qy 880 TGGACAGTACTTCTTACTATCTTTATGCGCTCCAGTACCATAACATCATACGGTGAGGC 939
Db 716 TGGACAGTACTTCTTACTATCTTTATGCGCTCCAGTACCATAACATCATACGGTGAGC 775

Qy 940 GGGTGGGATCATCATCAGTTGCAATCTGGGGGCTTGCACGGTTCAGGCAATCTTGTTCA 999
Db 776 GGGTGGGATCACCATCAGCGCCATCTCTGGGCGAGCTGCGAGCTGCGGGGCTCTTGTTCA 835

Qy 1000 TCATTTACTCGGACGAGTCTGATCATCTGCTGCTCATCTGCTCATCACCATCTTTCACCATGC 1059
Db 836 TCATTTACTCAGACAGAGTCTGTTATCATCTGCTCATCACCCTGTTCTTCCACCATGC 895

Qy 1060 TGGCCCTCATGGCTTCTCTCATGCTCCACATGTTTCTCATGGCCAGAGCTGCACATCAAGA 1119
Db 896 TGGCTCTCATGGCGTCTCTCTATGCTCCACATGTTTCTCATGGCCAGAGCTCCACATTAAGA 955

Qy 1120 GAATCGCGCTCTCTCCGGGACACGGGACCAATCCGCCAAGGGGCCAAATGAAGGGTGCCA 1179
Db 956 GGATCGCGGTCTCTCCAGGTAGCGGCACCAATCCGCCAGGGGCCAAATGAAGGGGCGA 1015

Qy 1180 TTACCTTGACCATACTCATTTGGGGTCTTGTGCTGCTGCTGGGCTCCATCTTCTCTCCACT 1239
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## RESULT 4

US-10-413-752-5

; Sequence 5, Application US/10413752

; Publication No. US20030171295A1

; GENERAL INFORMATION:

; APPLICANT: Frank Lee

; APPLICANT: Dennis Huszar

; APPLICANT: Wei Gu

; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL

; FILE OF INVENTION: IN THE REGULATION OF BODY WEIGHT

; FILE REFERENCE: 7853-145

; CURRENT APPLICATION NUMBER: US/10/413,752

; CURRENT FILING DATE: 2003-04-14

; PRIOR APPLICATION NUMBER: US/09/322,695

; PRIOR FILING DATE: 1999-05-28

; PRIOR APPLICATION NUMBER: 08/662,560

; PRIOR FILING DATE: 1996-06-10

; NUMBER OF SEQ ID NOS: 12

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 5

; LENGTH: 1671













[illegible]

	Db	319	AGCCTGTTGGAGAACATTTCTAGTGTATCGTGCGCATAGCCAAAGACAAGAAGACTTCGACTCA	378
	Qy	678	CCCATGTACTTTTTTCATCTGTAGCGCTGGCTGTGGCCGATATGCTGGTAGCGGTTTCCAAC	737
	Db	379	CCCATGTACTTTTTTCATCTGTAGTCTGGCTGTGGCGGACATGCTGGTAGCGGTTTCCGAC	438
	Qy	738	GGGTGAGAGACCATTGTCATCACCCCTGTTGAACAGTACGGATACGGACGCCAGAGATTTC	797
	Db	439	GGGTGAGAAAACCATGCTCATCACCCCTGCTAAACAGTACGGACACGGACGCCAGAGCTTC	498
	Qy	798	ACGGTGAATATTGATAATGTCAATGACTCGGTGATCTGTAGCTCTTGTCTGCCTCGCATTT	857
	Db	499	ACCGTGAATATTGATAATGTCAATGACTCTGTGATCTGTAGCTCTTGTCTGCATTCATTT	558
	Qy	858	TGCAGCCTGCTCTCAAATTGCAGTGGACAGGTACTTTACTATCTTTTATGCCCCCTCCAGTAC	917
	Db	559	TGCAGCCTGCTTTCCATTGCAGTGGACAGGTAATTTCACTATCTTTTACGGCTCCAGTAC	618
	Qy	918	CATTAACATCATGACGGTGAGCGGGTTGGGATCATCATCAATCAATCAATCTGGCGGCTTGC	977
	Db	619	CATTAACATTTATGACGGTTAGCGGGTGGGGATCATCATCAATCAATCTGGCGAGCTTGC	678
	Qy	978	ACGGTGTCAAGGCATCTTGTTTCATCAATTTACTTCGGACAGTACTGCTGTCAATCATCTGCCTC	1037
	Db	679	ACAGTATCGGGCGTTCTTTTATCAATTTACTTCGGACAGCGCTGTCAATCATCTGCCTC	738
	Qy	1038	ATCACCATGTTCTTTCACATGCTGGCCCTCATNGGCTTCTCTCTAAGTCCCAATGTTCCCTC	1097
	Db	739	ATTACCATGTTCTTTCACCATGCTGGTTCTCATGGCCTCTCTATATGCCCATGTTCCCTG	798
	Qy	1098	ATGCCAGACTGCACATCAAGAGAAATCGCGTCTCCCGGSCACCGGACCATCCGCGCAA	1157
	Db	799	ATGCCAGAGCTTCAATTAAGAGGATCGTGTCTCCCGGSCACGGGTACCATCCGAAG	858
	Qy	1158	GGGGCCAAACATGAAGGGTGCCATTACCTTGACCACTCATATGGGGTCTTCGTGCTCTGC	1217
	Db	859	GGTGCCAAACATGAAGGGCGCAATTACCTTGACCAATCTGATTTGGAGTGTGTTGTCTGC	918
	Qy	1218	TGGGCTCCATCTTCCTGCCACTTGATTAATCTACATCTCTTGTCCCAGAAATCCATCTGT	1277
	Db	919	TGGGCCCGGTTTTTCTCCATTTACTGTTCTACATCTCTTGTCTCAGAAATCCATCTGC	978
	Qy	1278	GTGTGCTTCATGCTC CATCTTTAACTTGTA CCTCAT TCTGATCTCATGTGTAACTCCATCATC	1337
	Db	979	GTGTGCTTCATGCTC CATCTTTAACTTGTA C TCTCAT CTGATCATGTGTAA GCGTGT CATC	1038
	Qy	1338	GACCTCTCATTTATGCACTCCGAGCGCAGAGCTGAGGAAAAACCTTCAAAGAGATCATC	1397
	Db	1039	GACCTCTCATTTATGCCCCCTGCGAGTCAAGAACTGAGGAAAAACCTTCAAAGAGATCATC	1098
	Qy	1398	TGTTGCTATCCTCTGGGTGGGCTTTGTGACTTGTGTAGCAGATACTAGCTGGGGACAGAG	1457
	Db	1099	TGTTTCTACCCCTGGGAGGCATCTGTGAGTTACTTGGCAGGTATTAA GTGGGACAGAG	1158
	Qy	1458	GAAGTACTTAAAAACATGCAACAGAGACTTCTTCAATCTCTCACAAACATGAATGTGTGCT	1517
	Db	1159	TGCATACTAGGTAGA - GACCTGCGAGAAATTTGTCACTCAGGCACAACTGAGCAGTGTACT	1217
	Qy	1518	TGGACAAACAGCTGCTCTTCAGTATAAGGACGAGGTT - GAGAAATATCTGTTGCAACAATT	1576
	Db	1218	T- CCCAACAGCTGCTCTAC TGTA TAGTCTTTGGTTGGAAAAATATCTACTGTATAAAT	1276
	Qy	1577	CAACTTTATGATGTTTTTGATGTGAAAAAAAATAATGCCAGGCTCTGTACATTTGCTAAATGT	1636
	Db	1277	GTAAGTTTATGACTTTTGA CGTGGGAAAAAGTCTCAACG ---TGTTATGTTTTATTGAC	1332
	Qy	1637	CATGCTACTTTTGGGCTGTGCATTTGTTAAATCCATTTTCGACGCTGTACACTTTGAATTT	1696
	Db	1333	CTTACTTTTTTGTGTGTAACCTGCTATTATTATGTTCTACAGCGTGGGCGCTATGGAGTT	1392
	Qy	1697	CTAGAAAAGAAAAAGCTTCC - ATTA AAAAGCATATCAGTGTGTTTCTTTGTTAT 1746	

[illegible]

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QY 1115 CAAGAGAAATCGCGTCTCCCGGCAACCGGCAACCATCGCCAAAGGGGCAACATGAAGGG 1174
DB 669 TAAGAGGATTCGTCTCCCGGCACTGGTGCCATCGCCAGAGTGCAATATGAAGGG 728
QY 1175 TGCCATTAACCTTGACCACTACTCAATTTGGGGTCTTCGTCTGCTGGGCTCCATTTCTCT 1234
DB 729 AGCGATTACCTTGACCACTCTGATTTGGGGTCTTTGTCTGCTGGGCCCCATTTCTCT 788
QY 1235 CCACCTTGATATTCTACATCTCTTGTCCCGCAAGATCCCATCTGATGCTGCTGCTCA 1294
DB 789 CCACCTTAATATTCTACATCTCTTGTCTCCAGAAATCCATATTGTGTGCTGCTCA 848
QY 1295 CTTTAACTTGACCTCAATCTTGATCATGTGTAACTCCATCATCGACCCCTCTCAATTTATGC 1354
DB 849 CTTTAACTTGATCTCATCTACTGATCATCTGTAAATTCATCATCGATCTCTGATTTATGC 908
QY 1355 ACTCCGAGCCAGAGCTGAGAAACCTTCAAAGAGATCATCTGTTGCTATCTCTGGG 1414
DB 909 ACTCCGAGTCAAGAACTGAGAAACCTTCAAAGAGATCATCTGTTGCTATCCCTGGG 968
QY 1415 TGGCCTTTGTGACTGTCTAGCAGATACTA 1444
DB 969 AGGCTTTGTGACTGTCTAGCAGATACTA 998

RESULT 11
US-10-305-720-1277
; Sequence 1277, Application US/10305720
; Publication No. US20040010136A1
; GENERAL INFORMATION:
; APPLICANT: Au-Young, Janice K.; Seilhamer, Jeffrey J.
; TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expression
; FILE REFERENCE: PA-0002-1 CON
; CURRENT APPLICATION NUMBER: US/10/305,720
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: 09/016,434
; PRIOR FILING DATE: 1998-01-30
; NUMBER OF SEQ ID NOS: 1490
; SOFTWARE: PERL Program
; SEQ ID NO 1277
; LENGTH: 999
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: GenBank ID No. US20040010136A1 g291977
US-10-305-720-1277

Query Match 41.2%; Score 818.8; DB 17; Length 999;
Best Local Similarity 89.2%; Pred. No. 5.1e-197;
Matches 883; Conservative 0; Mismatches 107; Indels 0; Gaps 0;

QY 455 CACCCTTCAGCAGGAATGCACTTCTCTCCACTTCTGGAACCGCAGCACTACGAGCA 514
DB 9 CTCACCCACCGTGGGATGCACACTTCTCTGCACTCTGGAACCGCAGCACTACAGACT 68
QY 515 GCAGGCAACGCCACTGATGCTCTTGGCAAGGCTACCCGACGGGGATGCTAGAGCA 574
DB 69 GCACAGCAATGCCAGTGAAGTCCCTTGGAAAGGCTACTCTGATGGAGGGTCTACGAGCA 128
QY 575 ACTCTTGCTCTCCCGGAGGTGTCGTGACTCTCGGGGTCAATAGCTTGTGGAGAACAT 634
DB 129 ACTTTTGTCTCTCTGAGGTTGTTGACTCTGCGGTGCTATGAGCTTGTGGAGATAT 189
QY 635 TCTGGTATCGTGGCAATAGCAAGAACTGCACTCTGCACTCACCCATGACTTTTTTCAT 694
DB 189 CTTAGTGATTGTGCAATAGCAAGAACTGCACTCTGCACTCACCCATGACTTTTTTCAT 248
QY 695 CTGTAGCCTGCTGTGGCGATATGCTGGTGAGGCTTCCAAAGGGTCTAGAGCACTCGT 754
DB 249 CTGCAGCTTGGCTGTGGCTGATATGCTGGTGAGGCTTCCAAATGGATCAGAAACCATAT 308
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QY 755 CATCACCTGTTGAACAGTACGATACGACGCGCAGAGTTTACGGTGAATATTGATAA 814
DB 309 CATCACCTATTAAACAGTACAGATACGATACGATGCGACAGATTTTACAGTGAATATTGATAA 368
QY 815 TGTCAATGACTCGGTGATGTGTAGCTCTCTTGTCTCGCTCGATTTTGCAGCCCTGCTCTCAAT 874
DB 369 TGTCAATGACTCGGTGATGTGTAGCTCTCTTGTCTCGATTTTGCAGCCCTGCTCTCAAT 428
QY 875 TGCAGTGGACAGGTACTTTACTATCTTTTATGCCCCCTCCAGTACCATAACATCATGACCGT 934
DB 429 TGCAGTGGACAGGTACTTTACTATCTTTTATGCTCTCCAGTACCATAACATCATGACAGT 488
QY 935 GAGCGGGTTGGGATCATCATCTGCTGCGGCTTGCACGGGTGTCAGGCACTCTT 994
DB 489 TAAGCGGGTTGGGATCATCATCTGCTGCGGCTTGCACGGGTGTCAGGCACTTTT 548
QY 995 GTTCATCATTTTACTCGGACAGTACTGCTGTGCATCATCTGCTCATACCATGTTCTTCCAC 1054
DB 549 GTTCATCATTTTACTCGATAGTGTGTCTCATCTGCTCATACCATGTTCTTCCAC 608
QY 1055 CATGCTGGCCCTCATGCTTCTCTACGTCACATGTTCTCATGCGGACACTGACAT 1114
DB 609 CATGCTGGCTCTCATGCTTCTCTATGTCCACATGTTCTCATGCGGCTTCCAT 668
QY 1115 CAAGAGAAATCGCGTCTCCCGGCAACCGGCAACCATCGCCAAAGGGGCAACATGAAGGG 1174
DB 669 TAAGAGGATTCGTCTCTCCCGGCACTGGTGCCATCGCCAGAGTGCCATATGAAGGG 728
QY 1175 TGCCATTAACCTTGACCACTACTCAATTTGGGGTCTTCGTCTGCTGGGCTCCATTTCTCT 1234
DB 729 AGCGATTACCTTGACCACTCTGATTTGGCGTCTTTGTTGCTGCTGGGCCCCATTTCTCT 788
QY 1235 CCACCTTGATATTCTACATCTCTTGTCCCGCAAGATCCCATCTGCTGCTGCTCATGCTCTCA 1294
DB 789 CCACCTTAATATTCTACATCTCTTGTCTCAGATCCCATATTTGTGTGCTCATGCTCTCA 848
QY 1295 CTTTAACTTGATCTCATCTGATCATGTGTAACTCCATCATCGACCCCTCTCAATTTATGC 1354
DB 849 CTTTAACTTGATCTCATCTGATCATGTGTAACTCCATCATCGATCTCTGATTTATGC 908
QY 1355 ACTCCGAGCCAGAGCTGAGAAACCTTCAAAGAGATCATCTGTTGCTATCTCTGGG 1414
DB 909 ACTCCGAGTCAAGAACTGAGAAACCTTCAAAGAGATCATCTGTTGCTATCCCTGGG 968
QY 1415 TGGCCTTTGTGACTGTCTAGCAGATACTA 1444
DB 969 AGGCTTTGTGACTGTCTAGCAGATACTA 998

RESULT 12
US-10-373-355-1
; Sequence 1, Application US/10373355
; Publication No. US2003016609A1
; GENERAL INFORMATION:
; APPLICANT: MacNeil, Douglas J.
; APPLICANT: Weinberg, David H.
; APPLICANT: Van der Ploeg, Leonardus H. T.
; TITLE OF INVENTION: DNA MOLECULES ENCODING THE MELANOCORTIN
; FILE REFERENCE: 20190P
; CURRENT APPLICATION NUMBER: US/10/373,355
; CURRENT FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: US/09/831,206
; PRIOR FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: PCT/US99/25767
; PRIOR FILING DATE: 1999-11-05
; PRIOR APPLICATION NUMBER: 60/107,721
; PRIOR FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 1030
; TYPE: DNA
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Db	729	AGCGATTACCTTGACCATCTCGAATGGCGTCTTTGTGTCTGTCTGGGCCCAATCTTCTCCT	788
Qy	1235	CCACTTGATATCTTACATCTCTTGTGCCAGAAATCCATACTGTGTGTCTTCATGTCTCA	1294
Db	789	CCACTTAATAATCTACATCTCTTGTCTCCAGAAATCCATATTGTGTGTCTTCATGTCTCA	848
Qy	1295	CTTTAACTTGTACTCATTTCTTGATCATGTGTAACTCCATCATCGACCTCTCATTTATGC	1354
Db	849	CTTTAACTTGTATTTCTCATATCTGATCATGTGTAAATCAATCATCGATCCTCTGATTATGC	908
Qy	1355	ACTCCGGAGCCAAGAGCTGAGGAAAACTTTCAAAGAGATCATCTGTTGTCTATCCTCTGGG	1414
Db	909	ACTCCGGAGTCAGAAGCTGAGGAAAACCTTCAAAGAGATCATCTGTTGTCTATCCCCTGGG	968
Qy	1415	TGGCCTTTTGTGACTTGTCTAGCAGATACTA	1444
Db	969	AGGCCCTTTGTGACTTGTCTAGCAGATATTA	998

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RESULT 14
US-10-417-820A-73
; Sequence 73, Application US/10417820A
; Publication No. US20030229216A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Ruoping
; APPLICANT: Liao, Chen W.
; APPLICANT: Lowitz, Kevin
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Behan, Dominic P.
; TITLE OF INVENTION: Constitutively Activated Human G Protein Coupled
; TITLE OF INVENTION: Receptors
; FILE REFERENCE: 7.US28.CON
; CURRENT APPLICATION NUMBER: US/10/417,820A
; CURRENT FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: 09/416,760
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 09/170,496
; PRIOR FILING DATE: 1998-10-13
; PRIOR APPLICATION NUMBER: 60/110,060
; PRIOR FILING DATE: 1998-11-27
; PRIOR APPLICATION NUMBER: 60/120,416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121,852
; PRIOR FILING DATE: 1999-02-26
; PRIOR APPLICATION NUMBER: 60/109,213
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: 60/123,944
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,945
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,948
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,951
; PRIOR FILING DATE: 1999-03-12
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 155
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 73
; LENGTH: 999
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-417-820A-73

Query Match 41.2%; Score 817.2; DB 17; Length 999;
Best Local Similarity 89.1%; Pred. No. 1.3e-196;
Matches 882; Conservative 0; Mismatches 108; Indels 0; Gaps 0;

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Qy      695  CTGTAGCTGTGGCCGATATGCTGGTGGAGGTTTCCAAACGGGTCCAGAGCAATCGT 754
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Qy      755  CATCACCTGTGTAACAGTACGGATACGGACGGCAGAGTTTCAACGGTGAATATTGATAA 814
Db      309  CATCACCTATTAAACAGTACAGATACGGATACGGATACGGATTTTCAAGTGAATATTGATAA 368
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Db      369  TGTCAATGACTCGGTGATCTGTAGCTCTTGTCTGGCTCGCTCGATTTGCGAGCTGCTCTCAAT 428
Qy      875  TGCAGTGACAGGCTACTTTTACTATCTTTTATGCCCTCCAGTACCATATCATGACGGT 934
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Qy      935  GAGCGGGTTGGGATCATCATGATGTCATCTGGGCGGCTTGCACGGTGTGACGATCTT 994
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US-10-723-955-73
; Sequence 73, Application US/10723955
; Publication No. US20040110238A1
; GENERAL INFORMATION:
; APPLICANT: Behan, Dominic P.
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Lin, I-Lin
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lehman-Bruinema, Karin
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; APPLICANT: Lowitz, Kevin P.
; APPLICANT: Dang, Huong T.
; APPLICANT: Chen, Ruoping
; APPLICANT: Gore, Martin
; APPLICANT: White, Carol
; TITLE OF INVENTION: Constitutively Activated Human G Protein Coupled
; TITLE OF INVENTION: Receptors
; FILE REFERENCE: 7.US29.CON
; CURRENT APPLICATION NUMBER: US/10/723,955
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: 10/417,820
; PRIOR FILING DATE: 2003-4-16
; PRIOR APPLICATION NUMBER: 09/416,760
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 09/170,496
; PRIOR FILING DATE: 1998-10-13
; PRIOR APPLICATION NUMBER: 60/110,060
; PRIOR FILING DATE: 1998-11-27
; PRIOR APPLICATION NUMBER: 60/120,416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121,852
; PRIOR FILING DATE: 1999-02-26
; PRIOR APPLICATION NUMBER: 60/109,213
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: 60/123,944
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,945
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; PRIOR FILING DATE: 1999-03-12
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; NUMBER OF SEQ ID NOS: 148
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; ORGANISM: Homo sapiens
US-10-723-955-73
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Query Match      41.2%; Score 817.2; DB 19; Length 999;
Best Local Similarity 89.1%; Pred. No. 1.3e-196;
Matches 882; Conservative 0; Mismatches 108; Indels 0; Gaps 0;
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Qy      455  CACCTTCACACGGAATGCACACTTCTCTCAGCTTCTGGAACCGGAGCCTACGAGCA 514
Db      9   CTCACCCACCGTGGGATGCACACTTCTCTGCACCTCTGGAACCGGAGCTTACAGACT 68
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Qy      575  ACTCTTGTCTCTCCCGGAGGTGTTGCTGACTCTGGGGGTCAATAGCTTGTCTGGAGAACAT 634
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Qy      635  TCTGTGATCTGTGGCAATAGCCAGAAACAGAAATCTGCATCTCACCCTGACTTTTTCAT 694
Db      189  CTTAGTGATTTGGCAATAGCCAGAAACAGAAATCTGCATTCACCCATGTACTTTTTCAT 248
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Qy      755  CATCACCTGTGAAACAGTACGGATACGGACGGCAGAGTTTCAACGGTGAATATTGATAA 814
Db      309  CATCACCTATTAAACAGTACAGATACGGATACGGATACGGATTTTCAAGTGAATATTGATAA 368
Qy      815  TGTCAATGACTCGGTGATCTGTAGCTCTTGTCTGGCTCGCTCGATTTGCGAGCTGCTCTCAAT 874
Db      369  TGTCAATGACTCGGTGATCTGTAGCTCTTGTCTGGCTCGCTCGATTTGCGAGCTGCTCTCAAT 428
Qy      875  TGCAGTGACAGGCTACTTTTACTATCTTTTATGCCCTCCAGTACCATATCATGACGGT 934
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Qy 1295 CTTTAACTTTGACCTCATTTCTGATCATGTGTAACCTCCATCATCGACCTCTCATTTATGC 1354
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Qy 1355 ACTCCGAGCCAAAGAGCTGAGGAAACCTTCAAAGAGATCATCTGTTGCTATCCTCTGGG 1414
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Qy 1415 TGGCCTTTGTCACCTTGTCTAGCAGATACTA 1444
Db 969 AGGCCTTTGTGACTTGTCTAGCAGATATTA 998
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Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0  
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Post-processing: Minimum Match 0%  
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Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	1638.5	94.9	332	1 US-08-672-109B-8	Sequence 8, Appl
3	1638.5	94.9	332	2 US-08-842-045-8	Sequence 8, Appl
4	1638.5	94.9	332	2 US-08-842-238-8	Sequence 8, Appl
5	1638.5	94.9	332	2 US-08-780-749A-2	Sequence 2, Appl
6	1638.5	94.9	332	3 US-08-629-335B-8	Sequence 8, Appl
7	1638.5	94.9	332	3 US-08-870-511-2	Sequence 2, Appl
8	1638.5	94.9	332	3 US-09-384-302A-9	Sequence 9, Appl
9	1632.5	94.6	332	2 US-08-662-560-2	Sequence 2, Appl
10	1632.5	94.6	332	2 US-08-780-749A-6	Sequence 6, Appl
11	1632.5	94.6	332	3 US-08-870-511-6	Sequence 6, Appl
12	1627.5	94.3	332	3 US-08-870-511-8	Sequence 8, Appl
13	1626.5	94.2	332	3 US-08-870-511-10	Sequence 10, Appl
14	1626.5	94.2	332	3 US-08-870-511-12	Sequence 12, Appl
15	1624.5	94.1	332	4 US-09-831-206-2	Sequence 2, Appl
16	1615.5	93.6	332	4 US-09-384-302A-6	Sequence 6, Appl
17	1592.5	92.3	332	3 US-08-706-281A-16	Sequence 16, Appl
18	1592.5	92.3	332	3 US-08-097-231-16	Sequence 16, Appl
19	1592.5	92.3	332	4 US-09-353-099-16	Sequence 16, Appl
20	1463	84.8	311	4 US-09-380-419C-3	Sequence 3, Appl
21	1405	81.4	293	4 US-09-384-302A-8	Sequence 8, Appl
22	1257	72.8	248	4 US-09-380-419C-4	Sequence 4, Appl
23	1026.5	59.5	325	3 US-08-706-281A-18	Sequence 18, Appl
24	1026.5	59.5	325	3 US-08-097-231-18	Sequence 18, Appl
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32	1003.5	58.1	325	4 US-08-387-805-16	Sequence 16, Appl
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35	981.5	56.9	360	1 US-08-672-109B-6	Sequence 6, Appl
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37	981.5	56.9	360	2 US-08-842-238-6	Sequence 6, Appl
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39	981.5	56.9	360	3 US-08-629-335B-6	Sequence 6, Appl
40	981.5	56.9	360	3 US-08-870-511-1	Sequence 1, Appl
41	981.5	56.9	360	4 US-09-709-066-4	Sequence 4, Appl
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43	965	55.9	323	2 US-08-044-812A-4	Sequence 4, Appl
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45	965	55.9	323	3 US-09-191-359-4	Sequence 4, Appl

ALIGNMENTS

RESULT 1  
US-08-671-525B-8  
; Sequence 8, Application US/08671525B  
; Patent No. 5703220  
; GENERAL INFORMATION:  
; APPLICANT: Yamada, Tadataka  
; APPLICANT: Gantz, Ira  
; TITLE OF INVENTION: Genes Encoding Melanocortin Receptors  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Harness, Dickey & Pierce, P.L.C.  
; STREET: P.O. Box 828  
; CITY: Bloomfield Hills  
; STATE: MI  
; COUNTRY: US  
; ZIP: 48303  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/671,525B  
; FILING DATE: June 27, 1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, DeAnn F.  
; REGISTRATION NUMBER: 36683  
; REFERENCE/DOCKET NUMBER: 2115-000853DVB  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (810)641-1600  
; TELEFAX: (810)641-0270  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 332 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-671-525B-8

Query Match 94.9%; Score 1638.5; DB 1; Length 332;  
Best Local Similarity 95.5%; Pred. No. 1.6e-125;  
Matches 317; Conservative 6; Mismatches 8; Indels 1; Gaps 1;  
Qy 1 MNSTLQHGHTSLHFWNRSTYGQHGNAATESIGKGYPDGCGYEQLFVSPVFTLGVISLL 60  
Db 2 VNSTLHGMHTSLHFWNRSTYRLHNSASESLGKGYSDGCGYEQLFVSPVFTLGVISLL 60  
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## RESULT 2

US-08-672-109B-8  
; Sequence 8, Application US/08672109B  
; Patent No. 5710265  
; GENERAL INFORMATION:  
; APPLICANT: Yamada, Tadataka  
; APPLICANT: Gantz, Ira  
; TITLE OF INVENTION: Genes Encoding Melanocortin Receptors  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Harness, Dickey & Pierce, P.L.C.  
; STREET: P.O. Box 828  
; CITY: Bloomfield Hills  
; STATE: MI  
; COUNTRY: US  
; ZIP: 48303  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/672.109B  
; FILING DATE: June 27, 1996  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, DeAnn F.  
; REGISTRATION NUMBER: 36683  
; REFERENCE/DOCKET NUMBER: 2115-000853DVC  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (810)641-1600  
; TELEFAX: (810)641-0270  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 332 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-672-109B-8

Query Match 94.9%; Score 1638.5; DB 1; Length 332;  
Best Local Similarity 95.5%; Pred. No. 1.6e-125;  
Matches 317; Conservative 6; Mismatches 8; Indels 1; Gaps 1;

Qy 1 MNSTLQHGHTSLHFWNRSTYQHGHNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60  
Db 2 VNST-HRGHMTSLHLNWRSSYRLHNSNASESLGKGYDGGCYEQLFVSPFVTLGVISLL 60  
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Db 301 IYALRSQELRKTKEIICCVPLGGLDLSRY 332

## RESULT 3

US-08-842-045-8  
; Sequence 8, Application US/08842045  
; Patent No. 5817787  
; GENERAL INFORMATION:  
; APPLICANT: Yamada, Tadataka  
; APPLICANT: Gantz, Ira  
; TITLE OF INVENTION: Genes Encoding Melanocortin Receptors  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Harness, Dickey & Pierce, P.L.C.  
; STREET: P.O. Box 828  
; CITY: Bloomfield Hills  
; STATE: MI  
; COUNTRY: US  
; ZIP: 48303  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/842.045  
; FILING DATE:  
; CLASSIFICATION: 536  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, DeAnn F.  
; REGISTRATION NUMBER: 36683  
; REFERENCE/DOCKET NUMBER: 2115-000853DVE  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (810)641-1600  
; TELEFAX: (810)641-0270  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 332 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-842-045-8

Query Match 94.9%; Score 1638.5; DB 2; Length 332;  
Best Local Similarity 95.5%; Pred. No. 1.6e-125;  
Matches 317; Conservative 6; Mismatches 8; Indels 1; Gaps 1;

Qy 1 MNSTLQHGHTSLHFWNRSTYQHGHNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60  
Db 2 VNST-HRGHMTSLHLNWRSSYRLHNSNASESLGKGYDGGCYEQLFVSPFVTLGVISLL 60  
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RESULT 6  
US-08-629-335B-8  
; Sequence 8, Application US/08629335B  
; Patent No. 6117975  
; GENERAL INFORMATION:  
; APPLICANT: Yamada, Tadataka  
; APPLICANT: Gantz, Ira  
; TITLE OF INVENTION: Genes Encoding Melanocortin Receptors  
; NUMBER OF SEQUENCES: 23  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Harness, Dickey & Pierce, P.L.C.  
; STREET: P.O. Box 828  
; CITY: Bloomfield Hills  
; STATE: MI  
; COUNTRY: US  
; ZIP: 48303  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/629,335B  
; FILING DATE: July 23, 1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Smith, DeAnn F.  
; REGISTRATION NUMBER: 36683  
; REFERENCE/DOCKET NUMBER: 2115-000853DVA  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (810)641-1600  
; TELEFAX: (810)641-0270  
; INFORMATION FOR SEQ ID NO: 8:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 332 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-08-629-335B-8

Query Match 94.9%; Score 1638.5; DB 3; Length 332;  
Best Local Similarity 95.5%; Pred. No. 1.6e-125;  
Matches 317; Conservative 6; Mismatches 8; Indels 1; Gaps 1;

Qy 1 MNSTLQHGHTSLHFWNRSTYQHGHNATESLGKGYPDGCGYEQLFVSPFVTLGVISLL 60  
:|||||

Db 2 VNST-HRGMTSLHLNRRSSYRLHNSASESLGKGYDGGCYEQLFVSPFVTLGVISLL 60  
:|||||

Qy 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
|||||

Db 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
|||||

Qy 121 IDNVDSVICSSLLASCSLSIAVDRYFTIFVALQVHNIMTVRRVGIISCIWAACTVS 180  
|||||

Db 121 IDNVDSVICSSLLASCSLSIAVDRYFTIFVALQVHNIMTVRRVGIISCIWAACTVS 180  
|||||

Qy 181 GILFIYSDSTAVIICLIITMFFTWLMALMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240  
|||||

Db 181 GILFIYSDSSAVIICLIITMFFTWLMALMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240  
|||||

Qy 241 MKGAIITLILGVVVCWAPFLHLIFVISCQNPYCVCFMSHFNLYLILMCSNIIDPL 300  
|||||

Db 241 MKGAIITLILGVVVCWAPFLHLIFVISCQNPYCVCFMSHFNLYLILMCSNIIDPL 300  
|||||

Qy 301 IYALRSQELRKTPEIKICCPYPLGGLCDLSRY 332  
|||||

Db 301 IYALRSQELRKTPEIKICCPYPLGGLCDLSRY 332  
|||||

RESULT 8  
US-09-384-302A-9  
; Sequence 9, Application US/09384302A  
; Patent No. 6451543  
; GENERAL INFORMATION:  
; APPLICANT: Kochendoerfer, Gerd G  
; APPLICANT: Hunter, Christie L  
; APPLICANT: Kent, Stephen B.H.  
; APPLICANT: Botti, Paolo  
; APPLICANT: Gryphon Sciences  
; TITLE OF INVENTION: Lipid Matrix-Assisted Chemical Ligation and Synthesis  
; FILE OF INVENTION: of Membrane Polypeptides  
; FILE REFERENCE: grfn-028/02WO  
; CURRENT APPLICATION NUMBER: US/09/384,302A  
; CURRENT FILING DATE: 1999-08-26  
; PRIOR APPLICATION NUMBER: 09/144,964  
; PRIOR FILING DATE: 1998-08-31  
; PRIOR APPLICATION NUMBER: 09/263,971  
; PRIOR FILING DATE: 1999-03-05  
; NUMBER OF SEQ ID NOS: 30

Db 301 IYALRSQELRKTPEIKICCPYPLGGLCDLSRY 332

RESULT 7  
US-08-870-511-2  
; Sequence 2, Application US/08870511  
; Patent No. 6287763  
; GENERAL INFORMATION:  
; APPLICANT: Lee, Frank  
; APPLICANT: Hueszar, Dennis  
; APPLICANT: Gu, Wei  
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL IN THE  
; FILE OF INVENTION: REGULATION OF BODY WEIGHT  
; FILE REFERENCE: 7853-083  
; CURRENT APPLICATION NUMBER: US/08/870,511  
; CURRENT FILING DATE: 1997-06-06  
; NUMBER OF SEQ ID NOS: 45  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 2  
; LENGTH: 332  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; US-08-870-511-2

Query Match 94.9%; Score 1638.5; DB 3; Length 332;  
Best Local Similarity 95.5%; Pred. No. 1.6e-125;  
Matches 317; Conservative 6; Mismatches 8; Indels 1; Gaps 1;

Qy 1 MNSTLQHGHTSLHFWNRSTYQHGHNATESLGKGYPDGCGYEQLFVSPFVTLGVISLL 60  
:|||||

Db 2 VNST-HRGMTSLHLNRRSSYRLHNSASESLGKGYDGGCYEQLFVSPFVTLGVISLL 60  
:|||||

Qy 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
|||||

Db 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
|||||

Qy 121 IDNVDSVICSSLLASCSLSIAVDRYFTIFVALQVHNIMTVRRVGIISCIWAACTVS 180  
|||||

Db 121 IDNVDSVICSSLLASCSLSIAVDRYFTIFVALQVHNIMTVRRVGIISCIWAACTVS 180  
|||||

Qy 181 GILFIYSDSTAVIICLIITMFFTWLMALMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240  
|||||

Db 181 GILFIYSDSSAVIICLIITMFFTWLMALMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240  
|||||

Qy 241 MKGAIITLILGVVVCWAPFLHLIFVISCQNPYCVCFMSHFNLYLILMCSNIIDPL 300  
|||||

Db 241 MKGAIITLILGVVVCWAPFLHLIFVISCQNPYCVCFMSHFNLYLILMCSNIIDPL 300  
|||||

Qy 301 IYALRSQELRKTPEIKICCPYPLGGLCDLSRY 332  
|||||

Db 301 IYALRSQELRKTPEIKICCPYPLGGLCDLSRY 332  
|||||

RESULT 8  
US-09-384-302A-9  
; Sequence 9, Application US/09384302A  
; Patent No. 6451543  
; GENERAL INFORMATION:  
; APPLICANT: Kochendoerfer, Gerd G  
; APPLICANT: Hunter, Christie L  
; APPLICANT: Kent, Stephen B.H.  
; APPLICANT: Botti, Paolo  
; APPLICANT: Gryphon Sciences  
; TITLE OF INVENTION: Lipid Matrix-Assisted Chemical Ligation and Synthesis  
; FILE OF INVENTION: of Membrane Polypeptides  
; FILE REFERENCE: grfn-028/02WO  
; CURRENT APPLICATION NUMBER: US/09/384,302A  
; CURRENT FILING DATE: 1999-08-26  
; PRIOR APPLICATION NUMBER: 09/144,964  
; PRIOR FILING DATE: 1998-08-31  
; PRIOR APPLICATION NUMBER: 09/263,971  
; PRIOR FILING DATE: 1999-03-05  
; NUMBER OF SEQ ID NOS: 30

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; TELEPHONE: 212-790-9090
; FAX: 212-790-9090
; TELEFAX: 212-869-8864
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 332 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-662-560-2

Query Match          94.6%; Score 1632.5; DB 2; Length 332;
Best Local Similarity 95.2%; Pred. No. 5.1e-125;
Matches 316; Conservative 6; Mismatches 9; Indels 1; Gaps 1;

QY   1 MNSTLGHMTSLHFWNRSTYGQHGNATESLGKGYPDGCGCYEQLFVSPVPVTGLGVISLL 60
Db   2 VNST-HRGMTSLHLWNRSRYLRHSNAESLGKGYSDGCGCYEQLFVSPVPVTGLGVISLL 60
QY   61 ENILVIVAAKNKLNLSHPMYFFICSLAVADMLVSNGSETIVITLNSDTDDAQSFVN 120
Db   61 ENILVIVAAKNKLNLSHPMYFFICSLAVADMLVSNGSETIIITLNSDTDDAQSFVN 120
QY   121 INDVIDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGIIISCIIWAAC TVS 180
Db   121 INDVIDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVKRVGISCIWAAC TVS 180
QY   181 GILFIYSYSTAVIICLIITMFFTLALMASLYVHMFLMARLHKRIAVLPGTGTIROGAN 240
Db   181 GILFIYSYDSSAVIICLIITMFFTLALMASLYVHMFLMARLHKRIAVLPGTGAIROCAN 240
QY   241 MKGAITLTILIGVFVVCWAPFFLHLIFYISCPONPYCVCFMSHFNLYLILMCNSIIDPL 300
Db   241 MKGAITLTILIGVFVVCWAPFFLHLIFYISCPONPYCVCFMSHFNLYLILMCNSIIDPL 300
QY   301 IVALRSEQLRKTPKEIICVPLGGLCDLSSRY 332
Db   301 IVALRSEQLRKTPKEIICVPLGGLCDLSSRY 332

RESULT 10
US-08-780-749A-6
; Sequence 6, Application US/08780749A
; Patent No. 5932779
; GENERAL INFORMATION:
; APPLICANT: Lee, Frank
; APPLICANT: Huszar, Dennis
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS
; TITLE OF INVENTION: USEFUL IN THE REGULATION OF BODY WEIGHT
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds LLP
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036/2711
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/780,749A
; FILING DATE: 08-JAN-1997
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Laura A. Coruzzi
; REGISTRATION NUMBER: 30,742
; REFERENCE/DOCKET NUMBER: 7853-064
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; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864/9741
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 332 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; US-08-780-749A-6

Query Match          94.6%; Score 1632.5; DB 2; Length 332;
Best Local Similarity 95.2%; Pred. No. 5.1e-125;
Matches 316; Conservative 6; Mismatches 9; Indels 1; Gaps 1;

Qy 1 MNSTLQHGHTSLHFWNRSTYQHGHNATESLGKGYDPGGCYEQLFVSPFVTLGVISLL 60
Db 2 VNST-HRGMHTSLHWNRSYRLHNSASESLGKGYSDGGCYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDDTAQSFVN 120
Db 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDDTAQSFVN 120
Qy 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGIIISCIWAACTVS 180
Db 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGIIISCIWAACTVS 180
Qy 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGIIISCIWAACTVS 180
Db 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGIIISCIWAACTVS 180
Qy 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLMARLHKRIAVLPCTGTGIRGAN 240
Db 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLMARLHKRIAVLPCTGTGIRGAN 240
Qy 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLMARLHKRIAVLPCTGTGIRGAN 240
Db 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLMARLHKRIAVLPCTGTGIRGAN 240
Qy 241 MKGAITLTILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300
Db 241 MKGAITLTILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300
Qy 301 IYALRSQELRKTKEIICCCYPLGGLCDLSRY 332
Db 301 IYALRSQELRKTKEIICCCYPLGGLCDLSRY 332

RESULT 12
US-08-870-511-8
; Sequence 8, Application US/08870511
; Patent No. 6287763
; GENERAL INFORMATION:
; APPLICANT: Lee, Frank
; APPLICANT: Huszar, Dennis
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL IN THE
; FILE REFERENCE: 7853-083
; CURRENT APPLICATION NUMBER: US/08/870,511
; CURRENT FILING DATE: 1997-06-06
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 332
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-870-511-8

Query Match          94.3%; Score 1627.5; DB 3; Length 332;
Best Local Similarity 94.9%; Pred. No. 1.3e-124;
Matches 315; Conservative 6; Mismatches 10; Indels 1; Gaps 1;

Qy 1 MNSTLQHGHTSLHFWNRSTYQHGHNATESLGKGYDPGGCYEQLFVSPFVTLGVISLL 60
Db 2 VNST-HRGMHTSLHWNRSYRLHNSASESLGKGYSDGGCYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDDTAQSFVN 120
Db 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDDTAQSFVN 120
Qy 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGIIISCIWAACTVS 180
Db 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGIIISCIWAACTVS 180
Qy 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLMARLHKRIAVLPCTGTGIRGAN 240
Db 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLMARLHKRIAVLPCTGTGIRGAN 240
Qy 241 MKGAITLTILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300
Db 241 MKGAITLTILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300
Qy 301 IYALRSQELRKTKEIICCCYPLGGLCDLSRY 332
Db 301 IYALRSQELRKTKEIICCCYPLGGLCDLSRY 332

RESULT 13
US-08-870-511-10
; Sequence 10, Application US/08870511
; Patent No. 6287763
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; GENERAL INFORMATION:
; APPLICANT: Lee, Frank
; APPLICANT: Huszar, Dennis
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL IN THE
; TITLE OF INVENTION: REGULATION OF BODY WEIGHT
; FILE REFERENCE: 7853-083
; CURRENT APPLICATION NUMBER: US/08/870,511
; CURRENT FILING DATE: 1997-06-06
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 332
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-870-511-10

Query Match          94.2%; Score 1626.5; DB 3; Length 332;
Best Local Similarity 94.9%; Pred. No. 1.6e-124;
Matches 315; Conservative 6; Mismatches 10; Indels 1; Gaps 1;

Qy 1 MNSTLQHGMTSLHFNWSTYQGHGNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
2 VNST-HRGMHTSLHLNRRSSYRLHNSASESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVIVAIAKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN 120
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
61 ENILVIVAIAKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN 120
Qy 121 IDNVDSVICSSLLASICSLLSIAVDRYFTIFYALQYHNIMTVRRVGIISCIWAACTVS 180
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
121 IDNVDSVICSSLLASICSLLSIAVDRYFTIFYALQYHNIMTVRRVGIISCIWAACTVS 180
Qy 181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHIKRIAVLPOTGTIROGAN 240
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHIKRIAVLPOTGTIROGAN 240
Qy 241 MKGAIITLILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
241 MKGAIITLILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Qy 301 IYALRSQELRKTPEKIIICCPYPLGGLCDLSRY 332
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
301 IYALRSQELRKTPEKIIICCPYPLGGLCDLSRY 332

RESULT 15
US-09-831-206-2
; Sequence 2, Application US/09831206
; Patent No. 6573070
; GENERAL INFORMATION:
; APPLICANT: MacNeill, Douglas J.
; APPLICANT: Weinberg, David H.
; APPLICANT: Van der Ploeg, Leonardus H. T.
; TITLE OF INVENTION: DNA MOLECULES ENCODING THE MELANOCORTIN
; TITLE OF INVENTION: 4 RECEPTOR PROTEIN FROM RHESUS MONKEY
; FILE REFERENCE: 20190P
; CURRENT APPLICATION NUMBER: US/09/831,206
; PRIOR FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: PCT/US99/25767
; PRIOR FILING DATE: 1999-11-05
; PRIOR APPLICATION NUMBER: 60/107,721
; PRIOR FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 332
; TYPE: PRT
; ORGANISM: rhesus monkey (Macaca mulatta)
US-09-831-206-2

Query Match          94.1%; Score 1624.5; DB 4; Length 332;
Best Local Similarity 94.6%; Pred. No. 2.3e-124;
Matches 314; Conservative 7; Mismatches 10; Indels 1; Gaps 1;

Qy 1 MNSTLQHGMTSLHFNWSTYQGHGNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
2 VNST-HRGMHTSLHFNWSTYQGHGNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVIVAIAKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN 120
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
61 ENILVIVAIAKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN 120
Qy 121 IDNVDSVICSSLLASICSLLSIAVDRYFTIFYALQYHNIMTVRRVGIISCIWAACTVS 180
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
121 IDNVDSVICSSLLASICSLLSIAVDRYFTIFYALQYHNIMTVRRVGIISCIWAACTVS 180
Qy 181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHIKRIAVLPOTGTIROGAN 240
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHIKRIAVLPOTGTIROGAN 240
Qy 241 MKGAIITLILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
241 MKGAIITLILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Qy 301 IYALRSQELRKTPEKIIICCPYPLGGLCDLSRY 332
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
301 IYALRSQELRKTPEKIIICCPYPLGGLCDLSRY 332

RESULT 14
US-08-870-511-12
; Sequence 12, Application US/08870511
; Patent No. 6287763
; GENERAL INFORMATION:
; APPLICANT: Lee, Frank
; APPLICANT: Huszar, Dennis
; APPLICANT: Gu, Wei
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL IN THE
; TITLE OF INVENTION: REGULATION OF BODY WEIGHT
; FILE REFERENCE: 7853-083
; CURRENT APPLICATION NUMBER: US/08/870,511
; CURRENT FILING DATE: 1997-06-06
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 332
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-870-511-12

Query Match          94.2%; Score 1626.5; DB 3; Length 332;
Best Local Similarity 94.9%; Pred. No. 1.6e-124;
Matches 315; Conservative 6; Mismatches 10; Indels 1; Gaps 1;

Qy 1 MNSTLQHGMTSLHFNWSTYQGHGNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
1 MNSTLQHGMTSLHFNWSTYQGHGNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVIVAIAKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN 120
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
61 ENILVIVAIAKKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN 120
Qy 121 IDNVDSVICSSLLASICSLLSIAVDRYFTIFYALQYHNIMTVRRVGIISCIWAACTVS 180
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
121 IDNVDSVICSSLLASICSLLSIAVDRYFTIFYALQYHNIMTVRRVGIISCIWAACTVS 180
Qy 181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHIKRIAVLPOTGTIROGAN 240
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHIKRIAVLPOTGTIROGAN 240
Qy 241 MKGAIITLILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
241 MKGAIITLILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Qy 301 IYALRSQELRKTPEKIIICCPYPLGGLCDLSRY 332
Db :|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
301 IYALRSQELRKTPEKIIICCPYPLGGLCDLSRY 332
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Db 301 IYALRSQELRKTFKBIIICCIPLGGLDLSRY 332

Search completed: August 3, 2005, 14:37:13  
Job time : 30 secs



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: August 3, 2005, 14:34:12 ; Search time 159 Seconds  
(without alignments)  
813.521 Million cell updates/sec

Title: US-09-884-211B-4  
Perfect score: 1726  
Sequence: 1 MNSTLQHGHTSLHFNRST.....PKEIICCVPLGLCDLSSRY 332

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1745140 seqs, 389608008 residues  
Total number of hits satisfying chosen parameters: 1745140

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Listing first 45 summaries

Database : Published Applications AA:  
1: /cgn2\_6/ptodata/2/pubpaa/US07\_PUBCOMB.pep.\*  
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6: /cgn2\_6/ptodata/2/pubpaa/PCTUS\_PUBCOMB.pep.\*  
7: /cgn2\_6/ptodata/2/pubpaa/US08\_NEW\_PUB.pep.\*  
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9: /cgn2\_6/ptodata/2/pubpaa/US09A\_PUBCOMB.pep.\*  
10: /cgn2\_6/ptodata/2/pubpaa/US09B\_PUBCOMB.pep.\*  
11: /cgn2\_6/ptodata/2/pubpaa/US09C\_PUBCOMB.pep.\*  
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13: /cgn2\_6/ptodata/2/pubpaa/US10A\_PUBCOMB.pep.\*  
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17: /cgn2\_6/ptodata/2/pubpaa/US10E\_PUBCOMB.pep.\*  
18: /cgn2\_6/ptodata/2/pubpaa/US10\_NEW\_PUB.pep.\*  
19: /cgn2\_6/ptodata/2/pubpaa/US11A\_PUBCOMB.pep.\*  
20: /cgn2\_6/ptodata/2/pubpaa/US11\_NEW\_PUB.pep.\*  
21: /cgn2\_6/ptodata/2/pubpaa/US60\_NEW\_PUB.pep.\*  
22: /cgn2\_6/ptodata/2/pubpaa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1726	100.0	332	10	US-09-884-211A-4
2	1685	97.6	332	10	US-09-884-211A-3
3	1638.5	94.9	332	14	US-10-207-330-9
4	1638.5	94.9	332	14	US-10-225-567A-158
5	1638.5	94.9	332	14	US-10-318-661-27
6	1632.5	94.6	332	10	US-09-876-252-74
7	1632.5	94.6	332	14	US-10-226-594-4
8	1632.5	94.6	332	14	US-10-413-752-2
9	1632.5	94.6	332	15	US-10-417-820A-74
10	1632.5	94.6	332	16	US-10-723-955-74
11	1627.5	94.3	332	10	US-09-876-252-136

12	1627.5	94.3	332	15	US-10-417-820A-136
13	1627.5	94.3	332	16	US-10-723-955-136
14	1624.5	94.1	332	14	US-10-373-355-2
15	1620.5	93.9	332	14	US-10-413-752-6
16	1615.5	93.6	332	14	US-10-207-330-6
17	1592.5	92.3	332	14	US-10-288-160-16
18	1592.5	92.3	332	14	US-10-074-754-2
19	1590	92.1	332	10	US-09-910-180-2
20	1463	84.8	311	16	US-10-834-485-3
21	1463	84.8	311	16	US-10-816-304-3
22	1405	81.4	293	14	US-10-207-330-8
23	1257	72.8	248	16	US-10-834-485-4
24	1257	72.8	248	16	US-10-816-304-4
25	1043.5	60.5	325	14	US-10-256-089-2
26	1026.5	59.5	325	14	US-10-288-160-18
27	1025.5	59.4	325	14	US-10-225-567A-160
28	1025.5	59.4	325	15	US-10-369-022-40
29	1003.5	58.1	325	13	US-10-052-545-16
30	994	57.6	323	9	US-09-903-395-2
31	994	57.6	323	17	US-10-603-249-2
32	984.5	57.0	360	14	US-10-226-594-3
33	982.5	56.9	360	17	US-10-741-600-870
34	981.5	56.9	360	14	US-10-225-567A-156
35	981.5	56.9	360	14	US-10-413-752-1
36	981.5	56.9	360	17	US-10-603-249-4
37	976.5	56.6	323	10	US-09-826-509-523
38	976.5	56.6	323	17	US-10-925-095-523
39	961	55.7	323	14	US-10-288-160-12
40	758.5	43.9	317	14	US-10-226-594-1
41	754.5	43.7	317	14	US-10-225-567A-162
42	754.5	43.7	317	15	US-10-353-690-60
43	754.5	43.7	317	15	US-10-164-717-6
44	754.5	43.7	317	16	US-10-322-281-166
45	754.5	43.7	317	17	US-10-741-600-1254

ALIGNMENTS

RESULT 1  
US-09-884-211A-4  
; Sequence 4, Application US/09884211A  
; Publication No. US20030032791A1  
; GENERAL INFORMATION:  
; APPLICANT: Alan et. al.  
; TITLE OF INVENTION: NOVEL MELANOCORTIN-4 RECEPTOR SEQUENCES AND  
; TITLE OF INVENTION: SCREENING ASSAYS TO IDENTIFY COMPOUNDS USEFUL  
; FILE REFERENCE: PC10743A  
; CURRENT APPLICATION NUMBER: US/09/884,211A  
; CURRENT FILING DATE: 2000-06-26  
; PRIOR APPLICATION NUMBER: 60/213,909  
; PRIOR FILING DATE: 2000-06-26  
; NUMBER OF SEQ ID NOS: 6  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 4  
; LENGTH: 332  
; TYPE: PRT  
; ORGANISM: Canine MC4R protein Sequence  
US-09-884-211A-4

Query Match	100.0%;	Score 1726;	DB 10;	Length 332;
Best Local Similarity	100.0%;	Pred. No. 1.7e-157;		
Matches 332;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	MNSTLQHGHTSLHFNRSTYGQHGNGNATESLGKGYDPGCGVEQLFVSPFVTLGVISLL	60	
Db	1	MNSTLQHGHTSLHFNRSTYGQHGNGNATESLGKGYDPGCGVEQLFVSPFVTLGVISLL	60	
Qy	61	ENILVIVAIKRNKHLSPMYFFFCISLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN	120	
Db	61	ENILVIVAIKRNKHLSPMYFFFCISLAVADMLVSVNSGSETIVITLLNSTDTDAQSFTVN	120	

Qy 121 IDNVDSVICSSLLASCSLLSIADRYFTFYALQYHNMTVRRVGGIIISCIWAACVS 180  
Db 121 IDNVDSVICSSLLASCSLLSIADRYFTFYALQYHNMTVRRVGGIIISCIWAACVS 180  
Qy 181 GILFIYSDSTAVIICLIITMFTMALMASLYVHMFMLARLHKRIAVLPGTGTIRQGAN 240  
Db 181 GILFIYSDSTAVIICLIITMFTMALMASLYVHMFMLARLHKRIAVLPGTGTIRQGAN 240  
Qy 241 MKGAITITILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300  
Db 241 MKGAITITILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300  
Qy 301 IYALRSQELRKTKEIICCPYGLGLDLSRY 332  
Db 301 IYALRSQELRKTKEIICCPYGLGLDLSRY 332

RESULT 2  
US-09-884-211A-3  
; Sequence 3, Application US/09884211A  
; Publication No. US20030032791A1  
; GENERAL INFORMATION:  
; APPLICANT: Alan et, al.  
; TITLE OF INVENTION: NOVEL MELANOCORTIN-4 RECEPTOR SEQUENCES AND  
; SCREENING ASSAYS TO IDENTIFY COMPOUNDS USEFUL  
; IN REGULATING ANIMAL APPETITE AND METABOLIC RATE  
; FILE REFERENCE: PGI0743A  
; CURRENT APPLICATION NUMBER: US/09/884,211A  
; PRIOR FILING DATE: 2000-06-26  
; PRIOR APPLICATION NUMBER: 60/213,909  
; PRIOR FILING DATE: 2000-06-26  
; NUMBER OF SEQ ID NOS: 6  
; SOFTWARE: PatentIn ver. 2.1  
; SEQ ID NO 3  
; LENGTH: 332  
; TYPE: PRT  
; ORGANISM: Feline MC4R protein Sequence  
US-09-884-211A-3

Query Match 97.6%; Score 1685; DB 10; Length 332;  
Best Local Similarity 97.6%; Pred. No. 1.5e-153;  
Matches 324; Conservative 3; Mismatches 5; Indels 0; Gaps 0;

Qy 1 MNSTLQHGHTSLHFWNRSTYGOHGNATESLGKGYDPGGCYEQLFVSPFVTLGVISLL 60  
Db 1 MNSTHGHGHTSLHFWNRSTYGPNSNASESLGKGYSDGCYEQLFVSPFVTLGVISLL 60  
Qy 61 ENILVIVAIAKNKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
Db 61 ENILVIVAIAKNKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
Qy 121 IDNVDSVICSSLLASCSLLSIADRYFTFYALQYHNMTVRRVGGIIISCIWAACVS 180  
Db 121 IDNVDSVICSSLLASCSLLSIADRYFTFYALQYHNMTVRRVGGIIISCIWAACVS 180  
Qy 181 GILFIYSDSTAVIICLIITMFTMALMASLYVHMFMLARLHKRIAVLPGTGTIRQGAN 240  
Db 181 GVLFIIYSDSAVILITMFTMALMASLYVHMFMLARLHKRIAVLPGTGTIRQGAN 240  
Qy 241 MKGAITITILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300  
Db 241 MKGAITITILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300  
Qy 301 IYALRSQELRKTKEIICCPYGLGLDLSRY 332  
Db 301 IYALRSQELRKTKEIICCPYGLGLDLSRY 332

RESULT 3  
US-10-207-330-9  
; Sequence 9, Application US/10207330  
; Publication No. US20030018169A1  
; GENERAL INFORMATION:

; APPLICANT: Kochendoerfer, Gerd G  
; APPLICANT: Hunter, Christie L.  
; APPLICANT: Kent, Stephen B.H.  
; APPLICANT: Botti, Paolo  
; APPLICANT: Gryphon Sciences  
; TITLE OF INVENTION: Lipid Matrix-Assisted Chemical Ligation and Synthesis  
; TITLE OF INVENTION: of Membrane Polypeptides  
; FILE REFERENCE: grifn-028/02WO  
; CURRENT APPLICATION NUMBER: US/10/207,330  
; CURRENT FILING DATE: 2002-07-30  
; PRIOR APPLICATION NUMBER: US/09/384,302  
; PRIOR FILING DATE: 1999-08-26  
; PRIOR APPLICATION NUMBER: 09/144,964  
; PRIOR FILING DATE: 1998-08-31  
; PRIOR APPLICATION NUMBER: 09/263,971  
; PRIOR FILING DATE: 1999-03-05  
; NUMBER OF SEQ ID NOS: 30  
; SOFTWARE: PatentIn ver. 2.1  
; SEQ ID NO 9  
; LENGTH: 332  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
US-10-207-330-9

Query Match 94.9%; Score 1638.5; DB 14; Length 332;  
Best Local Similarity 95.5%; Pred. No. 4.4e-149;  
Matches 317; Conservative 6; Mismatches 8; Indels 1; Gaps 1;

Qy 1 MNSTLQHGHTSLHFWNRSTYGOHGNATESLGKGYDPGGCYEQLFVSPFVTLGVISLL 60  
Db 2 VNST-HRGHMTSLHLNRRSYRLHNSNASESLGKGYSDGCYEQLFVSPFVTLGVISLL 60  
Qy 61 ENILVIVAIAKNKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
Db 61 ENILVIVAIAKNKNLHSPMYFFICSLAVADMLVSVNSGSETIVITLNSDTDAQSFTVN 120  
Qy 121 IDNVDSVICSSLLASCSLLSIADRYFTFYALQYHNMTVRRVGGIIISCIWAACVS 180  
Db 121 IDNVDSVICSSLLASCSLLSIADRYFTFYALQYHNMTVRRVGGIIISCIWAACVS 180  
Qy 181 GILFIYSDSTAVIICLIITMFTMALMASLYVHMFMLARLHKRIAVLPGTGTIRQGAN 240  
Db 181 GILFIYSDSAVILITMFTMALMASLYVHMFMLARLHKRIAVLPGTGTIRQGAN 240  
Qy 241 MKGAITITILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300  
Db 241 MKGAITITILIGVFWVCWAPFFLHLIFYISCPQNPYCVCFMSHFNLYLILMCSIIDPL 300  
Qy 301 IYALRSQELRKTKEIICCPYGLGLDLSRY 332  
Db 301 IYALRSQELRKTKEIICCPYGLGLDLSRY 332

RESULT 4  
US-10-225-567A-158  
; Sequence 158, Application US/10225567A  
; Publication No. US20030113798A1  
; GENERAL INFORMATION:  
; APPLICANT: LifeSpan Biosciences  
; APPLICANT: Brown, Joseph P.  
; APPLICANT: Burmer, Glenna C.  
; APPLICANT: Roush, Christine L.  
; TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS  
; FILE REFERENCE: 1920-4-4  
; CURRENT APPLICATION NUMBER: US/10/225,567A  
; CURRENT FILING DATE: 2001-12-19  
; PRIOR APPLICATION NUMBER: 60/257,144  
; PRIOR FILING DATE: 2000-12-19  
; NUMBER OF SEQ ID NOS: 2292  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 158

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; LENGTH: 332
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-225-567A-158

Query Match          94.9%; Score 1638.5; DB 14; Length 332;
Best Local Similarity 95.5%; Pred. No. 4.4e-149;
Matches 31; Conservative 6; Mismatches 8; Indels 1; Gaps 1;

Qy 1 MNSTLQGHMTSLHFWNRSTYGOHGNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
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Db 2 VNST-HRGMTSLHLWNRSSYRLHNSASESLGKGYDGGCYEQLFVSPFVTLGVISLL 60

Qy 61 ENILVIVIAAKNKNLHSPMTFFICSLAVADMLVSVNGSETIVITLNSDITDQAQSTVN 120
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 61 ENILVIVIAAKNKNLHSPMTFFICSLAVADMLVSVNGSETIVITLNSDITDQAQSTVN 120

Qy 121 IDNVDSVICSSLLASICSLLSIADVRYFTFYALQVHNMTVRVGGIIISCIWAACVTS 180
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 121 IDNVDSVICSSLLASICSLLSIADVRYFTFYALQVHNMTVRVGGIIISCIWAACVTS 180

Qy 181 GILFIYSDSTAVIICLIITWFFTMLALMASLYVHMFMLARLHKRIAVLPQTGTIROGAN 240
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 181 GILFIYSDSSAVIICLIITWFFTMLALMASLYVHMFMLARLHKRIAVLPQTGTIROGAN 240

Qy 241 MKGAITLITLIGVFWVCWAPFFLHLIFVISCQPNPYCVCFMSPHNLYLILMCSNIIDPL 300
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 241 MKGAITLITLIGVFWVCWAPFFLHLIFVISCQPNPYCVCFMSPHNLYLILMCSNIIDPL 300

Qy 301 IYALRSQELRKTKEIICCYPLGGCLDLSSRY 332
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 301 IYALRSQELRKTKEIICCYPLGGCLDLSSRY 332

RESULT 5
US-10-318-661-27
; Sequence 27, Application US/10318661
; Publication No. US20030167476A1
; GENERAL INFORMATION:
; APPLICANT: Conklin, Bruce R.
; TITLE OF INVENTION: Selective Target Cell Activation By
; TITLE OF INVENTION: Expression of A G Protein-Coupled Receptor Activated
; FILE OF INVENTION: Superiorly By Synthetic Ligand
; FILE REFERENCE: UCAL-049CIP2
; CURRENT APPLICATION NUMBER: US/10/318,661
; PRIOR FILING DATE: 2003-05-05
; PRIOR APPLICATION NUMBER: US 09/341,446
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US97/05334
; PRIOR FILING DATE: 1997-03-25
; PRIOR APPLICATION NUMBER: US 08/622,348
; PRIOR FILING DATE: 1996-03-26
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 27
; LENGTH: 332
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-318-661-27

Query Match          94.9%; Score 1638.5; DB 14; Length 332;
Best Local Similarity 95.5%; Pred. No. 4.4e-149;
Matches 31; Conservative 6; Mismatches 8; Indels 1; Gaps 1;

Qy 1 MNSTLQGHMTSLHFWNRSTYGOHGNATESLGKGYDGGCYEQLFVSPFVTLGVISLL 60
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 2 VNST-HRGMTSLHLWNRSSYRLHNSASESLGKGYDGGCYEQLFVSPFVTLGVISLL 60

Qy 61 ENILVIVIAAKNKNLHSPMTFFICSLAVADMLVSVNGSETIVITLNSDITDQAQSTVN 120
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||
Db 61 ENILVIVIAAKNKNLHSPMTFFICSLAVADMLVSVNGSETIVITLNSDITDQAQSTVN 120

Qy 121 IDNVDSVICSSLLASICSLLSIADVRYFTFYALQVHNMTVRVGGIIISCIWAACVTS 180
   :||| ||||| ||||| :||| :||| :||| :||| :||| :||| :||| :|||

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Qy 61 ENILVVAIAKKNLHSPMYFFICSLAVADMLVSVNGSETIVITLLNSTDTDAQSFVN 120
Db 61 ENILVVAIAKKNLHSPMYFFICSLAVADMLVSVNGSETIITLLNSTDTDAQSFVN 120
Qy 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGGIISCIWAACVS 180
Db 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGGIISCIWAACVS 180
Qy 181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHKRIAVLPGTGTIROGAN 240
Db 181 GILFIYSDSSAVIICLITMFTMLMASLYVHMFMLMARLHKRIAVLPGTGTIROGAN 240
Qy 241 MKGATITLIGVFWVCWAPFLLHIFVISPQNPYCVCFMSPHNLVLLIMCNSIIDPL 300
Db 241 MKGATITLIGVFWVCWAPFLLHIFVISPQNPYCVCFMSPHNLVLLIMCNSIIDPL 300
Qy 301 IYALRSOELRKTKEIICCYPLGGLCDLSRY 332
Db 301 IYALRSOELRKTKEIICCYPLGGLCDLSRY 332
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## RESULT 11

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US-09-876-252-136
; Sequence 136, Application US/09876252
; Publication No. US20030018182A1
; GENERAL INFORMATION:
; APPLICANT: Behan, Dominic P.
; APPLICANT: Lehmann-Bruinsma, Karin
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Lowitz, Kevin P.
; APPLICANT: Lin, I-Lin
; APPLICANT: Dang, Huong T.
; APPLICANT: Chen, Ruoping
; APPLICANT: Liaw, Chen W.
; TITLE OF INVENTION: Non-Endogenous Constitively Activated Human G Protein Coupled Rec
; FILE REFERENCE: AREN-0054
; CURRENT APPLICATION NUMBER: US/09/876,252
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 09/416,760
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 09/170,496
; PRIOR FILING DATE: 1998-10-13
; PRIOR APPLICATION NUMBER: 60/110,060
; PRIOR FILING DATE: 1998-11-27
; PRIOR APPLICATION NUMBER: 60/120,416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121,852
; PRIOR FILING DATE: 1999-02-26
; PRIOR APPLICATION NUMBER: 60/109,213
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: 60/123,944
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,945
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,948
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,951
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,946
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,949
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/152,524
; PRIOR FILING DATE: 1999-09-03
; PRIOR APPLICATION NUMBER: 60/151,114
; PRIOR FILING DATE: 1999-08-27
; PRIOR APPLICATION NUMBER: 60/108,029
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: 60/136,436
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136,439
; PRIOR FILING DATE: 1999-05-28
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; PRIOR APPLICATION NUMBER: 60/136,567
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137,127
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137,131
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/141,448
; PRIOR FILING DATE: 1999-06-29
; PRIOR APPLICATION NUMBER: 60/136,437
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/156,555
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,634
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,653
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/157,280
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,294
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,281
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,282
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/156,633
; PRIOR FILING DATE: 1999-09-29
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 136
; LENGTH: 332
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-876-252-136
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Query Match 94.3%; Score 1627.5; DB 10; Length 332;
Best Local Similarity 94.9%; Pred No. 5.1e-148;
Matches 315; Conservative 6; Mismatches 10; Indels 1; Gaps 1;

Qy 1 MNSTLQHGMTSLHFWNRSTYGOHGNATESLGKGYDPDGCYEQLFVSPFVTLGVISLL 60
Db 2 VNST-HRGMTSLHLNRRSYRLHNSASESLGKGYSDGCGYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVVAIAKKNLHSPMYFFICSLAVADMLVSVNGSETIVITLLNSTDTDAQSFVN 120
Db 61 ENILVVAIAKKNLHSPMYFFICSLAVADMLVSVNGSETIITLLNSTDTDAQSFVN 120
Qy 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGGIISCIWAACVS 180
Db 121 IDNVDSVICSSLLASICSLSIAVDRYFTIFVALQYHNIMTVRRVGGIISCIWAACVS 180
Qy 181 GILFIYSDSTAVIICLITMFTMLMASLYVHMFMLMARLHKRIAVLPGTGTIROGAN 240
Db 181 GILFIYSDSSAVIICLITMFTMLMASLYVHMFMLMARLHKRIAVLPGTGTIROGAN 240
Qy 241 MKGATITLIGVFWVCWAPFLLHIFVISPQNPYCVCFMSPHNLVLLIMCNSIIDPL 300
Db 241 MKGATITLIGVFWVCWAPFLLHIFVISPQNPYCVCFMSPHNLVLLIMCNSIIDPL 300
Qy 301 IYALRSOELRKTKEIICCYPLGGLCDLSRY 332
Db 301 IYALRSOELRKTKEIICCYPLGGLCDLSRY 332
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## RESULT 12

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US-10-417-820A-136
; Sequence 136, Application US/10417820A
; Publication No. US20030229216A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Ruoping
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lowitz, Kevin
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Behan, Dominic P.
```



```
; APPLICANT: MacNeil, Douglas J.
; APPLICANT: Weinberg, David H.
; TITLE OF INVENTION: DNA MOLECULES ENCODING THE MELANOCORTIN
; FILE REFERENCE: 20190P
; CURRENT APPLICATION NUMBER: US/10/373,355
; PRIOR FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: US/09/831,206
; PRIOR FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: PCT/US99/25767
; PRIOR FILING DATE: 1999-11-05
; PRIOR APPLICATION NUMBER: 60/107,721
; PRIOR FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 332
; TYPE: PRT
; ORGANISM: rhesus monkey (Macaca mulatta)
US-10-373-355-2

Query Match      94.1%; Score 1624.5; DB 14; Length 332;
Best Local Similarity 94.6%; Pred. No. 9.9e-148;
Matches 314; Conservative 7; Mismatches 10; Indels 1; Gaps 1;

Qy 1 MNSTLQGMHTSLHFVNRSTYGOHGNATESLGKGYDPGGCYEQLFVSPFVTLGVISLL 60
Db 2 VNST-HRGMHTSLHFNWRSYRLHNSASESLGKGYSDGGCYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNGSETIVITLNSDTDTAQSTVN 120
Db 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNGSETIVITLNSDTDTAQSTVN 120
Qy 121 IDNVDSVICSSLLASICSLSIAVDRYFTFYALQYHNIMTVRRVGIIISCIWAACTVS 180
Db 121 IDNVDSVICSSLLASICSLSIAVDRYFTFYALQYHNIMTVRRVGIIISCIWAACTVS 180
Qy 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240
Db 181 GVLFIYSDSSAVIICLITMFFTMLVLMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240
Qy 241 MKGAIITLILIGVFWVCWAPFFLHLFIYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Db 241 MKGTITLILIGVFWVCWAPFFLHLFIYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Qy 301 IYALRSQELRKTKFKIICCYPLGGLCDLSRY 332
Db 301 IYALRSQELRKTKFKIICCYPLGGLCDLSRY 332

Search completed: August 3, 2005, 14:49:29
Job time : 165 secs

; APPLICANT: MacNeil, Douglas J.
; APPLICANT: Weinberg, David H.
; TITLE OF INVENTION: DNA MOLECULES ENCODING THE MELANOCORTIN
; FILE REFERENCE: 20190P
; CURRENT APPLICATION NUMBER: US/10/373,355
; PRIOR FILING DATE: 2003-02-25
; PRIOR APPLICATION NUMBER: US/09/831,206
; PRIOR FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: PCT/US99/25767
; PRIOR FILING DATE: 1999-11-05
; PRIOR APPLICATION NUMBER: 60/107,721
; PRIOR FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 332
; TYPE: PRT
; ORGANISM: rhesus monkey (Macaca mulatta)
US-10-373-355-2

Query Match      94.1%; Score 1624.5; DB 14; Length 332;
Best Local Similarity 94.6%; Pred. No. 9.9e-148;
Matches 314; Conservative 7; Mismatches 10; Indels 1; Gaps 1;

Qy 1 MNSTLQGMHTSLHFVNRSTYGOHGNATESLGKGYDPGGCYEQLFVSPFVTLGVISLL 60
Db 2 VNST-HRGMHTSLHFNWRSYRLHNSASESLGKGYSDGGCYEQLFVSPFVTLGVISLL 60
Qy 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNGSETIVITLNSDTDTAQSTVN 120
Db 61 ENILVIVAIKKNLHSPMYFFICSLAVADMLVSVNGSETIVITLNSDTDTAQSTVN 120
Qy 121 IDNVDSVICSSLLASICSLSIAVDRYFTFYALQYHNIMTVRRVGIIISCIWAACTVS 180
Db 121 IDNVDSVICSSLLASICSLSIAVDRYFTFYALQYHNIMTVRRVGIIISCIWAACTVS 180
Qy 181 GILFIYSDSTAVIICLITMFFTMLMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240
Db 181 GILFIYSDSSAVIICLITMFFTMLMASLYVHMFMLARLHKRIAVLPGTGTIROGAN 240
Qy 241 MKGAIITLILIGVFWVCWAPFFLHLFIYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Db 241 MKGAIITLILIGVFWVCWAPFFLHLFIYISCPQNPYCVCFMSHFNLYLILIMCNSIIDPL 300
Qy 301 IYALRSQELRKTKFKIICCYPLGGLCDLSRY 332
Db 301 IYALRSQELRKTKFKIICCYPLGGLCDLSRY 332

RESULT 15
US-10-413-752-6
; Sequence 6, Application US/10413752
; Publication No. US20030171295A1
; GENERAL INFORMATION:
; APPLICANT: Frank Lee
; APPLICANT: Dennis Huszar
; APPLICANT: Wei Gu
; TITLE OF INVENTION: SCREENING METHODS FOR COMPOUNDS USEFUL
; FILE REFERENCE: 7853-145
; CURRENT APPLICATION NUMBER: US/10/413,752
; CURRENT FILING DATE: 2003-04-14
; PRIOR APPLICATION NUMBER: US/09/322,695
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 08/662,560
; PRIOR FILING DATE: 1996-06-10
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 332
; TYPE: PRT
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